

**✓** DRILL

la. Type of work:

lb. Type of Well:

CONFIDENT

FORM APPROVED OMB No. 1004-0137

UNITED STATES								
DEPARTMENT OF	THE	INTERIOR						
BUREAU OF LAND	) MA	NAGEMENT						

APPLICATION FOR PERMIT TO DRILL OR REENTER

REENTER

	Lapites suly 51, 2010				
RIOR MENT	5. Lease Serial No. UTU-011604				
L OR REENTER	6. If Indian, Allotee or Tribe Name N/A				
	7 If Unit or CA Agreement, Name and No. Prickly Pear / UTU-79487				
Single Zone Multiple Zone	8. Lease Name and Well No. Prickly Pear Unit Federal 6-22D-12-15				
	9. API Well No. pending 43.007-31361  10. Field and Pool, or Exploratory Jen. with				
one No. (include area code)	10. Field and Pool, or Exploratory Jen mit				
312-8134	Brickly Pear/Wasatch-Mesaverde				
requirements.*)	11. Sec., T. R. M. or Blk.and Survey or Area				
	Sec. 22, T12S-R15E				

Name of Operator Bill Barrett Corporation 3b. Phone No. (include area code) 3a. Address 1099 18th Street, Suite 2300 303-312-8134 Denver, CO 80202 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) At surface NENW, 716' FNL, 2279' FWL At proposed prod. zone SENW, 1980' FNL, 1980' FWL, Sec. 22 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office\*

approximately 45 miles from Myton, Utah 15. Distance from proposed\* 716' SH / 1980' BH 16. No. of acres in lease location to nearest

Oil Well ✓ Gas Well Other

Carbon County 17. Spacing Unit dedicated to this well 40 acres

UT

property or lease line, ft. (Also to nearest drig. unit line, if any) Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth 7800'

1760

20. BLM/BIA Bond No. on file Nationwide Bond #WYB000040

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 7200' graded ground 05/15/2008

23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the

25. Signature Sallanes	Name (Printed/Typed) Tracey Fallang	Date / 08
Title Environmental/Regulatory Analyst	Section 1997 Annual Section 1997	75
Approved by Signature	Name (Printed/Typed) BRADLEY G. HILL	Date 03-11-08
Title	Officenvironmental Manager	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

Federal Approval of this Action is Necessary

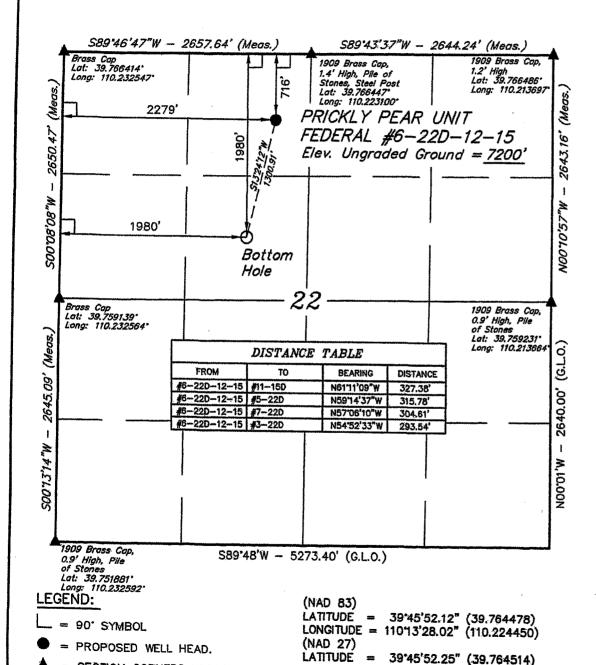
RECEIVED MAR 0 7 2008

566414X

DIV. OF OIL, GAS & MINING

surf 54,5037 7084 44013224 764586 39,76115 -110.223597 110.224669 44017084

## T12S, R15E, S.L.B.&M.



LONGITUDE = 110"13'25.46" (110.223739)

= SECTION CORNERS LOCATED.

## BILL BARRETT CORPORATION

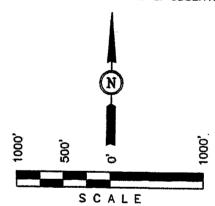
Well location, PRICKLY PEAR UNIT FEDERAL #6-22D-12-15, located as shown in the NE 1/4 NW 1/4 of Section 22, T12S, R15E, S.L.B.&M., Carbon County, Utah.

#### BASIS OF ELEVATION

COTTON TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 31, T12S, R16E, S.L.B.&M. TAKEN FROM THE TWIN HOLLOW QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7386 FEET.

#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



#### CERTIFICATE

BEST OF MY KNOWLEDGE AND

## UINTAH ENGINEERING

LANDING ORVEYING VERNAL, UTAH 84078

(435) 789-1017

SCALE DATE SURVEYED: DATE DRAWN: 1" = 1000"11-12-07 11-26-07 PARTY REFERENCES D.R. J.M. C.G. G.L.O. PLAT WEATHER COLD BILL BARRETT CORPORATION

85 SOUTH 200 EAST -



January 31, 2008

Ms. Diana Mason State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, Utah 84114-5801

RE: Directional Drilling R649-3-11

Prickly Pear Unit Federal 6-22D-12-15

SHL: 716' FNL & 2279' FWL NENW 22-T12S-R15E BHL: 1980' FNL & 1980' FWL SENW 22-T12S-R15E

Carbon County, Utah

#### Dear Ms. Mason:

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill ("APD") regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the "Exception to Location and Siting of Wells."

- The above-mentioned proposed location is within the Prickly Pear Unit Area;
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area;
- BBC hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. If you should have any questions or need further information, please contact me at 303-312-8129.

Sincerely,

Doug Gundry-White Senior Landman

RECEIVED

MAR 0 7 2008

DIV. OF OIL, GAS & MINING

1099 18TH STREET

SUITE 2300

DENVER, CO 80202

303.293.9100

303.291.0420

#### **DRILLING PROGRAM**

# BILL BARRETT CORPORATION Prickly Pear Unit Federal #6-22D-12-15

NENW, 716' FNL, 2279' FWL, Sec. 22, T12S-R15E (surface hole) SENW, 1980' FNL, 1980' FWL, Sec. 22, T12S-R15E (bottom hole) Carbon County, Utah

## 1-3. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals</u>

<u>Formation</u>	Depth - MD	Depth - TVD
Green River	Surface	Surface
Wasatch	2840'*	2782'*
North Horn	5005'*	4762'*
Dark Canyon	6735'*	6482'*
Price River	6960'*	6707'*
TD	7800'*	7500'*

#### PROSPECTIVE PAY

#### 4. Casing Program

<u>Hole</u> <u>Size</u>	SETTING (FROM)	<u>G DEPTH</u> (TO)	Casing Size	Casing Weight	Casing Grade	Thread	Condition
12 1/4"	surface	1,000'	9 5/8"	36#	J or K 55	ST&C	New
8 3/4"	surface	7,800'	5 ½"	17#	N-80	LT&C	New
&							
7 7/8"	! !						

Note: Pending evaluation of anticipated stress on the production casing, BBC may use 5 ½", 20# P-110 LT&C production casing instead of the 17# N-80. BBC is also evaluating the benefit of using 4-1/2", 11.6#, I-80, LT&C production casing and wishes to have that option approved in this APD. The 4-1/2" casing design sheet is included in this package. Cement volumes would be adjusted accordingly.

#### 5. Cementing Program

9 5/8" Surface Casing	Approximately 240 sx Halliburton Light Premium with additives mixed at 12.7 ppg (yield = 1.85 ft <sup>3</sup> /sx) and 170 sx Premium cement with additives mixed at 15.8 ppg (yield = 1.16 ft <sup>3</sup> /sx) circulated to surface with 100% excess				
5 ½" Production Casing	Approximately 1530 sx 50/50 Poz Premium cement with additives mixed at 13.4 ppg (yield = 1.49 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC 900°.				
Note: Actual volumes to be calculated from caliper log.					

<sup>\*</sup>Members of the Mesaverde formation and Wasatch formation (inclusive of the North Horn) are primary objectives for oil/gas.

Bill Barrett Corporation
Drilling Program
Prickly Pear Unit Federal #6-22D-12-15
Carbon County, Utah

#### 6. Mud Program

<u>Interval</u>	Weight	<u>Viscosity</u>	Fluid Loss (API filtrate)	Remarks
0-40'	8.3 – 8.6	27 – 40		Native Spud Mud
40' – 1000'	8.3 - 8.6	27 – 40	15 cc or less	Native/Gel/Lime
1000' – TD	8.6 - 9.5	38 – 46	15 cc or less	LSND/DAP

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce tork and drag.

Note: Air drilling is not anticipated for this location. However, in the event air drilling should occur:

- Fresh water would be used to suppress the dust coming out. The blooie line, approximately 37' long and 6" diameter, would run from the pit to the wellhead. There is no ignition system as burnable gas should not be encountered.
- Capacity of compressor: 1250SCFM with an 1170 SCFM on standby, which would be located very near the wellbore. The compressor has switches to shut off should any problems be encountered.
- The rig has mud pumps capable of pumping the kill fluid (fresh water), of which there is 500 bbls on location at all times.

#### 7. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment					
0-1000'	No pressure control required					
1000' – TD	11" 3000# Ram Type BOP					
	11" 3000# Annular BOP					
- Drilling spool to a	- Drilling spool to accommodate choke and kill lines;					
- Ancillary equipme	ent and choke manifold rated at 3,000#. All BOP and BOPE tests will be in					
accordance with the	ne requirements of onshore Order No. 2;					
- The BLM and the	- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in					
advance of all BOP pressure tests.						
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up						
to operate most ef	ficiently in this manner.					

#### 8. Auxiliary Equipment

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

Bill Barrett Corporation
Drilling Program
Prickly Pear Unit Federal #6-22D-12-15
Carbon County, Utah

#### 9. Testing, Logging and Core Programs

Cores	None anticipated;
Testing	None anticipated;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	Run every 1000' and on trips, slope only;
Logging	DIL-GR-SP, FDC-CNL-GR-CAL-Pe-Microlog, Sonic-GR, all TD to surface.

#### 10. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 3705 psi\* and maximum anticipated surface pressure equals approximately 2055 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

#### 11. <u>Drilling Schedule</u>

**Location Construction:** 

May 15, 2008

Spud:

June 1, 2008

Duration:

15 days drilling time

30 days completion time

<sup>\*</sup>Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

<sup>\*\*</sup>Maximum surface pressure =  $A - (0.22 \times TD)$ 

Well name:

Bill Barrett

Utah: West Tavaputs Field

String type:

Operator; Surface

Carbon County, UT

Design is based on evacuated pipe.

Design parameters:

Coliapse

Mud weight:

9.50 ppg

Minimum design factors:

Collapse: Design factor

1.125

Environment:

H2S considered?

Surface temperature:

Bottom hole temperature: Temperature gradient:

89 °F 1.40 °F/100ft

No

75.00 °F

Minimum section length:

1,000 ft

Burst:

Design factor

1.00

Cement top:

Surface

Burst

Max anticipated surface

pressure:

2,735 psi

Internal gradient: Calculated BHP

Annular backup:

9.50 ppg

2,955 psi

Tension: 8 Round STC:

1.80 (J) 8 Round LTC: 1.80 (J)

Butiress: 1.80 (J) Premium.

Body yield:

7.80 (J) 7.80 (B)

Tension is pased on puoyed weight. Neutral point: 859 ft

Re subsequent strings:

Non-directional string.

Next setting depth: Next mud weight:

9.500 ppg Next setting BHP: ≼,935 psi

Fracture mud wt: Fracture depth: injection pressure

10.000 ppg 10,000 8 5,195 psi

10,000 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (In)	Internal Capacity (ft²)
4	1000	9.625	36.00	J/K-55	ST&C	1000	1000	8.796	77.2
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor
1	493	2020	4.094	2735	3520	1.29	31	<b>45</b> 3	14.64 J

Prepared Dominic Spencer by: Bill Barrett

Phone: (303) 312-8143 FAX: (303) 312-8195

Date: August 1,2003 Denver, Colorado

Remarks:

Collegse is based on a vertical depth of 1000 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collegse purposes. Collapse strength is based on the Westcott, Duniop & Kemier method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Utah: West Tavaputs WeB name: Bill Barrett Орельют, Production String typs: Carbon County, UT

Design parameters:

Collapse

Mud weight:

9.50 ppg

Minimum design factors:

Collapse:

Design factor

Environment:

H2S considered?

Surface temperature: Bottom note temperature: Temperature gradient:

No 75.00 °F 215 F

1.40 \*F/100ft

Minimum section length:

Non-directional string.

1,500 R

Burst:

Design factor

1.00

1.125

Cement top:

2,375 ft

Burst

Max anticipated surface

pressure: internal gradient: Calculated BHP

4,705 psi 0.02 psi/ft

4,935 psi

Tension: 8 Round STC:

1.80 (J)

8 Round LTC: Buttress:

Premium: Body yield:

1.80 (J) 1.80 (J) 1.80 (B)

Annular backup: 9.50 ppg

Design is based on evacuated pipe.

Tension is based on buoyed weight. Neutral point

2.551

Run Segment Nominal End True Vert Measured Drift internal Size Weigh! Grade Depth Depth Diameter Capacity Finish Sec Length (114) (lbs/ft) (ft) (in) (ft) (51) (in) 10000 4.767 344.E 10000 LTGC 1 10000 5.5 17.00 N-80 Tension Tension Tension Run Coliapse Coliapse Collapse Bursi Burst Burst Seç Load Strength Design Load Strength Design Load Strength Design (psi) Factor (Kips) (Kips) Factor (psi) Factor (psi) (psi) 4935 6290 4705 7740 1.65 348 2.39 / 1.275

Prepared Dominic Spencer by: Bill Barrett

Phone: (303) 312-8143 FAX: (303) 312-8195

Date: August 1,2003 Denver, Colorado

Collapse is based on a vertical depth of 10000 ft. a mud weight of 9,6 ppg. The casing is considered to be evacuated for collapse purposes. Collegue surength is based on the Westcott. Dunlop & Kemier method of biexiet correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

West Tavaputs General

Operator

Bill Barrett

String type:

Production

Design is based on evacuated pipa.

Location:

Carbon County, Utah

Design parameters:

Collapse

Mud weight;

9.50 ppg

Minimum design factors:

Collapse:

Design factor

1.125

Environment:

H2S considered? Surface temperature:

No 75.00 °F

Bottom hole temperature: Temperature gradient:

189 °F 1.40 \*F/100ft

Minimum section length:

1,500 ft

Burst:

Design factor

1.00

Cement top:

2,500 ft

Burst

Max anticipated surface.

pressure: internal gradient:

0.22 psi/fit

Tension: 8 Round STC:

Body yield:

1.80 (J)

Kick-off point

Directional Info - Build & Drop 1000 //

Catculated BHP

4,015 psi

B Round LTC:

1.80 (J) 1.60 (J) 1.50 (3) Departure at shoe:

2165 R

No backup mud specified.

Buttress: Premium:

1.50 (B)

Maximum doolec: inclination at snos: 2 71005 0 "

Tension is based on buoyed weight. 7.560 ft Neutral point:

Run Sea	Segment <b>Lengt</b> h	Size	Nominal Weight	Grade	End <b>Finis</b> h	True Veri Depth	ivisasured Depth		internal Capacity
1	(ft) 8730	(in) 5.5	(lbs/ft) 20.00	P-110	LT&C	(ft) 8138	(ft) 8730	(in) 4.853	(#*) 353.3
Run Seq	Collapse Load (psi) 4016	Collapse Strength (psi) 11100	Collapse Design Factor 2.764	Burst Load (psl) 4016	Burst Strength (psl) 12630	Burst Design Factor 3.14	Tension Load (Kips) 139	Tension Strength (Kips) 548	Tension Design Factor 3.93 J

Prepared Dominic Spancer

by: Bill Barrett Corporation

Phone: (303) 312-8143 FAX: (303) 312-8195

Date: August 25,2004 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 8138 ft. a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is besed on the Westcott, Dunlop & Kemier method of biaxial correction for tension.

Burst attength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:

Operator:

Bill Barrett Corporation

String type: Production

Design parameters:

Collapse-

Design is based on evacuated pipe.

Mud weight:

9.50 ppg

Minimum design factors:

West Tavaputs General

Collapse:

Burst:

Design-factor

Design factor

1.125

1.00

Environment:

H2S considered?

No 60.00 °F

Bottom hole temperature:

200 °F

Minimum section length:

Cement top:

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: 2,735 psi 0.22 psi/ft

Calculated BHP

4,935 psi

Tension:

Buttress:

Premium: Body vield:

1.80 (J) 8 Round LTC: 1.80 (J)

1.80 (J)1.80 (B)

1.80 (J)

Tension is based on buoyed weight.

Neutral point;

8,580 F

Surface temperature:

Temperature gradient:

1.40 °F/100ft

1,500 ft 2.500 ft

Non-directional string.

Run Seç	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (In)	Internal Capacity (ft°)
1	10000	4.5	11.60	1-80	LT&C	10000	10000	3.875	231.8
Run Seq 1 .	Collapse Load (psi) 4935	Collapse Strength (psi) 6350	Collapse Design Factor 1.287	Burst Load (psl) 4935	Burst Strength (psl) 7780	Burst Design Factor 1.58	Tension Load (Kips) 100	Tension Strength (Kips) 223	Tension Design Factor 2.24 J

Prepared Dominic Spencer by: Bill Barreti

. Phone: (303) 312-8143 FAX: (303) 312-8195

Date: December 13,2005 Denver, Colorado

Remarks:

Collapse is based on a vertical depth of 10000 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



# **Bill Barrett Corporation**

#### **NINE MILE CEMENT VOLUMES**

Well Name:

Prickly Pear Unit Federal 6-22D-12-15

#### Surface Hole Data:

Total Depth:	1,000'
Top of Cement:	0'
OD of Hole:	12.250"
OD of Casing:	9.625"

#### Calculated Data:

Lead Volume:	219.2	ft <sup>3</sup>
Lead Fill:	700'	
Tail Volume:	94.0	ft <sup>3</sup>
Tail Fill:	300'	

#### Cement Data:

Lead Yield:	1.85	ft <sup>3</sup> /sk
Tail Yield:	1.16	ft <sup>3</sup> /sk
% Excess:	100%	

#### Calculated # of Sacks:

240	# SK's Lead:
170	# SK's Tail:

#### **Production Hole Data:**

Total Depth:	7,800'
Top of Cement:	900'
OD of Hole:	8.750"
OD of Casing:	5.500"

#### Calculated Data:

Lead Volume:	1742.9	ft <sup>3</sup>
Lead Fill:	6,900'	

#### Cement Data:

Lead Yield:	1.49	ft <sup>3</sup> /sk	eu/or
% Excess:	30%		

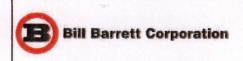
#### Calculated # of Sacks:

# SK's Lead: 1530

## Prickly Pear Unit Federal 6-22D-12-15 Proposed Cementing Program

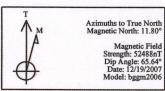
Job Recommendation		Su	rface Casing
Lead Cement - (700' - 0')			
Halliburton Light Premium	Fluid Weight:	12.7	lbm/gal
2.0% Calcium Chloride	Slurry Yield:	1.85	ft <sup>3</sup> /sk
0.125 lbm/sk Ploy-E-Flake	Total Mixing Fluid:	9.9	Gal/sk
	Top of Fluid:	0'	
	Calculated Fill:	700'	
	Volume:	78.09	bbl
	Proposed Sacks:	240	sks
Tail Cement - (1000' - 700')			
Premium Cement	Fluid Weight:	15.8	lbm/gal
94 lbm/sk Premium Cement	Slurry Yield:	1.16	ft <sup>3</sup> /sk
2.0% Calcium Chloride	Total Mixing Fluid:	4.97	Gal/sk
0.125 lbm/sk Ploy-E-Flake	Top of Fluid:	700'	
	Calculated Fill:	300'	
	Volume:	33.47	bbl
	Proposed Sacks:	170	sks

Job Recommendation	Produc	ction Casing	
Lead Cement - (7800' - 900')			
50/50 Poz Premium	Fluid Weight:	13.4	lbm/gal
3.0 % KCL	Slurry Yield:	1.49	ft <sup>3</sup> /sk
0.75% Halad®-322	Total Mixing Fluid:	7.06	Gal/sk
3.0 lbm/sk Silicalite Compacted	Top of Fluid:	900'	
0.2% FWCA	Calculated Fill:	6,900'	
0.125 lbm/sk Poly-E-Flake	Volume:	403.52	bbl
1.0 lbm/sk Granulite TR 1/4	Proposed Sacks:	1530	sks



Weatherford<sup>®</sup>

PRICKLY PEAR UF #6-22D-12-15 716' FNL, 2279' FWL **SECTION 22 T12S T15E** CARBON COUNTY, UTAH

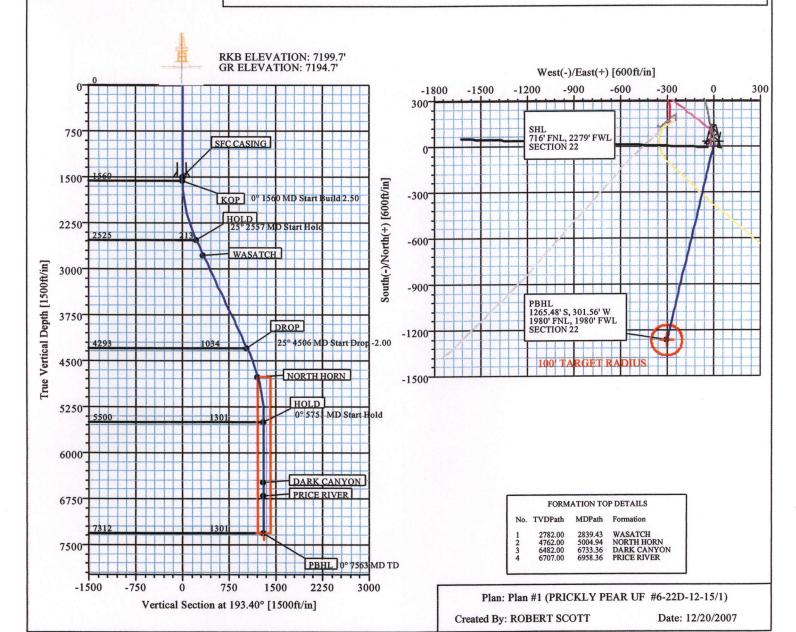


TOTAL CORRECTION TO TRUE NORTH: 11.80°

					SECTION I	DETAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	193.40	0.00	0.00	0.00	0.00	0.00	0.00	
2	1560.00	0.00	193.40	1560.00	0.00	0.00	0.00	0.00	0.00	
3	2556.52	24.91	193,40	2525.41	-207.45	-49.43	2.50	193.40	213.26	
4	4505.71	24.91	193.40	4293.23	-1006.17	-239.76	0.00	0.00	1034.34	
5	5751.36	0.00	193.40	5500.00	-1265.48	-301.56	2.00	180.00	1300.91	
6	7563.36	0.00	193,40	7312.00	-1265.48	-301.56	0.00	193.40	1300.91	PBHL_6-22

		W	ELL DETAILS					
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
PRICKLY PEAR UF #6-22D-12-15	-4.06	-15.01	7085506.27	1998959.79	39°45'52.110N	110°13'28.012W	N/A	

TARGET DETAILS Longitude Shape TVD +N/-S +E/-W Northing Easting Latitude PBHL\_6-22 7312.00 -1265.48 -301.56 7084236.62 1998676.31 39°45'39.602N 110°13'31.874W Circle (Radius: 100)





Field:

Company: BILL BARRETT CORP

CARBON COUNTY, UTAH

Site: Well: PRICKLY PEAR 4-22D PAD

Wellpath:

PRICKLY PEAR UF #6-22D-12-15

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Co-ordinate(NE) Reference:

Date: 12/19/2007

Time: 17:00:13

Page: Well: PRICKLY PEAR UF #6-22D-12-15

SITE 7199.7

Well (0.00N,0.00E,193.40Azi)

Minimum Curvature

Db: Sybase

Field:

CARBON COUNTY, UTAH

Map System: US State Plane Coordinate System 1983

Geo Datum: GRS 1980 Sys Datum: Mean Sea Level Map Zone:

Utah, Central Zone

Coordinate System: Geomagnetic Model:

Well Centre bggm2006

Site:

PRICKLY PEAR 4-22D PAD

**SECTION 22 T12S R15E** 

Site Position:

Geographic From:

Northing: Easting:

Easting:

7085510.54 ft 1998974.74 ft Latitude:

39 45 52.150 N 110 13

Longitude: North Reference: 27.820 W True

Position Uncertainty: **Ground Level:** 

0.00 ft 7194.70 ft

**Grid Convergence:** 

0.82 deg

Well:

PRICKLY PEAR UF #6-22D-12-15

-4.06 ft Northing:

+N/-S

+E/-W

716' FNL, 2279' FWL

7085506.27 ft

**Slot Name:** Latitude:

39 45 52.110 N

**Position Uncertainty:** 

-15.01 ft 0.00 ft 1998959.79 ft

Longitude:

**Drilled From:** 

**Declination:** 

110 13 28.012 W

Surface

Wellpath:

**Current Datum:** 

Magnetic Data:

Field Strength:

Vertical Section:

Well Position:

Height 7199.70 ft

Tie-on Depth: **Above System Datum:** 

0.00 ft Mean Sea Level 11.80 deg

12/19/2007 52488 nT

ft

0.00

Depth From (TVD)

Mag Dip Angle: +N/-S +E/-W

65.64 deg Direction deg

ft ft 0.00 193.40 0.00

Plan:

Principal:

Plan #1

Yes

**Date Composed:** 

12/19/2007

Version:

Tied-to:

From Surface

#### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100f	Build t deg/100f	Turn t deg/100ft	TFO deg	Target
0.00	0.00	193.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1560.00	0.00	193.40	1560.00	0.00	0.00	0.00	0.00	0.00	0.00	
2556.52	24.91	193.40	2525.41	-207.45	-49.43	2.50	2.50	0.00	193.40	
4505.71	24.91	193.40	4293.23	-1006.17	-239.76	0.00	0.00	0.00	0.00	
5751.36	0.00	193.40	5500.00	-1265.48	-301.56	2.00	-2.00	0.00	180.00	
7563.36	0.00	193.40	7312.00	-1265.48	-301.56	0.00	0.00	0.00	193.40	PBHL_6-22

#### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
1560.00	0.00	193.40	1560.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
1660.00	2.50	193.40	1659.97	-2.12	-0.51	2.18	2.50	2.50	0.00	
1760.00	5.00	193.40	1759.75	-8.48	-2.02	8.72	2.50	2.50	0.00	
1860.00	7.50	193.40	1859.14	-19.07	-4.54	19.61	2.50	2.50	0.00	
1960.00	10.00	193.40	1957.97	-33.87	-8.07	34.82	2.50	2.50	0.00	
2060.00	12.50	193.40	2056.04	-52.85	-12.59	54.33	2.50	2.50	0.00	
2160.00	15.00	193.40	2153.17	-75.97	-18.10	78.09	2.50	2.50	0.00	
2260.00	17.50	193.40	2249.17	-103.18	-24.59	106.07	2.50	2.50	0.00	
2360.00	20.00	193.40	2343.85	-134.45	-32.04	138.21	2.50	2.50	0.00	
2460.00	22.50	193.40	2437.05	-169.70	-40.44	174.46	2.50	2.50	0.00	
2556.52	24.91	193.40	2525.41	-207.45	-49.43	213.26	2.50	2.50	0.00	HOLD
2560.00	24.91	193.40	2528.57	-208.88	-49.77	214.72	0.00	0.00	0.00	
2660.00	24.91	193.40	2619.27	-249.85	-59.54	256.85	0.00	0.00	0.00	
2760.00	24.91	193.40	2709.96	-290.83	-69.30	298.97	0.00	0.00	0.00	
2839.43	24.91	193.40	2782.00	-323.38	-77.06	332.43	0.00	0.00	0.00	WASATCH



Company: BILL BARRETT CORP Field:

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

Well: Wellpath:

Site:

PRICKLY PEAR UF #6-22D-12-15

Date: 12/19/2007 Co-ordinate(NE) Reference:

SITE 7199.7

Time: 17:00:13 Page: 2 :: Well: PRICKLY PEAR UF #6-22D-12-15

Vertical (TVD) Reference: Section (VS) Reference:

Well (0.00N,0.00E,193.40Azi)

Minimum Curvature **Survey Calculation Method:** 

Db: Sybase

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
2860.00	24.91	193.40	2800.66	-331.81	-79.07	341.10	0.00	0.00	0.00	<u> </u>
2960.00	24.91	193.40	2891.35	-372.78	-88.83	383.22	0.00	0.00	0.00	
3060.00	24.91	193.40	2982.05	-413.76	-98.60	425.34	0.00	0.00	0.00	
3160.00	24.91	193.40	3072.74	-454.74	-108.36	467.47	0.00	0.00	0.00	
3260.00	24.91	193.40	3163.44	-495.71	-118.13	509.59	0.00	0.00	0.00	
2260.00	04.04	400.40	005440	F00.00	407.00	==4.70	0.00	0.00	0.00	
3360.00	24.91	193.40	3254.13	-536.69	-127.89	551.72	0.00	0.00	0.00	
3460.00 3560.00	24.91	193.40	3344.82	-577.67	-137.66	593.84	0.00	0.00	0.00	
3660.00	24.91	193.40	3435.52	-618.64	-147.42	635.96	0.00	0.00	0.00	
3760.00	24.91 24.91	193.40 193.40	3526.21 3616.91	-659.62 -700.60	-157.18 -166.95	678.09 720.21	0.00 0.00	0.00 0.00	0.00 0.00	
3860.00	24.91	193.40	3707.60	-741.57	-176.71	762.34	0.00	0.00	0.00	
3960.00	24.91	193.40	3798.30	-782.55	-186.48	804.46	0.00	0.00	0.00	
4060.00	24.91	193.40	3888.99	-823.53	-196.24	846.59	0.00	0.00	0.00	
4160.00	24.91	193.40	3979.69	-864.50	-206.01	888.71	0.00	0.00	0.00	
4260.00	24.91	193.40	4070.38	-905.48	-215.77	930.83	0.00	0.00	0.00	
4360.00	24.91	193.40	4161.08	-946.46	-225.54	972.96	0.00	0.00	0.00	
4460.00	24.91	193.40	4251.77	-987.43	-235.30	1015.08	0.00	0.00	0.00	
4505.71	24.91	193.40		-1006.17	-239.76	1034.34	0.00	0.00	0.00	DROP
4560.00	23.83	193.40		-1027.95	-244.96	1056.74	2.00	-2.00	0.00	
4660.00	21.83	193.40		-1065.69	-253.95	1095.53	2.00	-2.00	0.00	
4760.00	19.83	193.40	A520 24	-1100.28	-262.19	1131.08	2.00	-2.00	0.00	
4860.00	17.83	193.40		-1131.67	-269.67	1163.35	2.00	-2.00	0.00	
4960.00	15.83	193.40		-1159.83	-276.38	1192.30	2.00	-2.00	0.00	
5004.94	14.93	193.40		-1171.42	-279.14	1204.22	2.00	-2.00	0.00	NORTH HORN
5060.00	13.83	193.40	4815.33	-1184.72	-282.31	1217.89	2.00	-2.00	0.00	
5160.00	11.83	193.40		-1206.31	-287.46	1240.09	2.00	-2.00	0.00	
5260.00	9.83	193.40		-1224.59	-291.81	1258.87	2.00	-2.00	0.00	
5360.00	7.83	193.40		-1239.51	-295.37	1274.22	2.00	-2.00	0.00	
5460.00	5.83	193.40	5209.14	-1251.08	-298.13	1286.11	2.00	-2.00	0.00	
5560.00	3.83	193.40	5308.78	-1259.26	-300.08	1294.52	2.00	-2.00	0.00	
5660.00	1.83	193.40	5408.65	-1264.06	-301.22	1299.45	2.00	-2.00	0.00	
5751.36	0.00	193.40		-1265.48	-301.56	1300.91	2.00	-2.00	0.00	HOLD
5760.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
5860.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
5960.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6060.00	0.00	193.40	5808 64	-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6160.00	0.00	193.40		-1265.48 -1265.48		1300.91	0.00	0.00	0.00	
6260.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
					-301.56					
6360.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6460.00	0.00	193.40	6208.64	-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6560.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6660.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6733.36	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	DARK CANYON
6760.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6860.00	0.00	193.40	6608.64	-1265.48	-301.56	1300.91	0.00	0.00	0.00	
6958.36	0.00	193.40	6707.00	-1265.48	-301.56	1300.91	0.00	0.00	0.00	PRICE RIVER
6960.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
7060.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
7160.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
7260.00	0.00	193.40		-1265.48	-301.56	1300.91	0.00	0.00	0.00	
7260.00	0.00						0.00	0.00	0.00	
7360.00 7460.00	0.00 0.00	193.40 193.40		-1265.48	-301.56	1300.91 1300.91	0.00 0.00	0.00 0.00	0.00	
/ 44E DE / LUIC /	U.UU	125.5 40	1200.04	-1265.48	-301.56	1300.91	0.00	0.00	0.00	



Field:

Company: BILL BARRETT CORP

CARBON COUNTY, UTAH

Site: Well:

PRICKLY PEAR 4-22D PAD

PRICKLY PEAR UF #6-22D-12-15 Wellpath: 1

Date: 12/19/2007

Co-ordinate(NE) Reference:

Time: 17:00:13 Page: 3 :: Well: PRICKLY PEAR UF #6-22D-12-15

Vertical (TVD) Reference:

SITE 7199.7

Well (0.00N,0.00E,193.40Azi) Section (VS) Reference: Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	Build	Turn	Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	
7563.36	0.00	193.40	7312.00	-1265.48	-301.56	1300.91	0.00	0.00	0.00	PBHL_6-22

#### Annotation

MD ft	TVD ft				
1560.00	1560.00	KOP			
2556.52	2525.41	HOLD			
4505.71	4293.23	DROP			
5751.36	5500.00	HOLD			
7563.36	7312.00	PBHL			

#### **Targets**

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL_6-22 -Circle (Radional -Plan hit target)			7312.00	-1265.48	-301.56	7084236.621	998676.31	39 45 39.602 N	110 13 31.874 W



# Weatherford International, Ltd.

**Anticollision Report** 

Company: Field:

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH

PRICKLY PEAR 4-22D PAD

Co-ordinate(NE) Reference:

Date: 12/20/2007

Time: 10:03:42

Page:

Reference Site: Reference Well:

PRICKLY PEAR UF #6-22D-12-15

Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15 SITE 7199.7

**Db:** Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria Interpolation Method: MD Depth Range:

Reference Wellpath: 1

100.00 to

Interval: 100.00 ft 7394.08 ft

Reference: Error Model: Scan Method:

Plan: Plan #1 ISCWSA Ellipse

Closest Approach 3D Ellipse

Maximum Radius: 10000.00 ft

Plan #1 Yes

Date Composed:

12/19/2007

**Error Surface:** 

Version: Tied-to:

From Surface

Principal:

Summary

Plan:

<site< th=""><th> Offset Wellpath Well</th><th>Wellpath</th><th>Reference MD ft</th><th>Offset MD ft</th><th>Ctr-Ctr Distance ft</th><th>-</th><th>Separation Factor</th><th>Warning</th></site<>	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Distance ft	-	Separation Factor	Warning
PRICKLY PE	AR 3-22FFFACKLY PEAF	R UF #11 1/-1	2000.00	1955.22	370.26	363.15	52.06	
PRICKLY PE	AR 3-22FFACKLY PEAF	R UF #8-120	1900.00	1902.59	324.41	317.69	48.26	
PRICKLY PE	AR 3-22FFACKLY PEAF	R UF #5929174P V3	5500.00	5405.27	1004.65	953.23	19.54	
PRICKLY PE	AR 3-22FFACKLY PEAF	R UF ##92/8921P V1	3300.00	3351.50	215.61	199.82	13.65	
PRICKLY PE	AR 4-2212RRCKLY PEAR	R UF #113/0 Plan: Plan #1 V1	500.00	499.23	20.38	18.35	10.03	
PRICKLY PE	AR 4-2212PRPCKLY PEAR	R UF #11440 Plan: Plan #1 V1	1600.00	1599.98	15.74	8.79	2.26	

Site: Well: PRICKLY PEAR 3-22 PAD

PRICKLY PEAR UF #11-15D-12-15

Wellpath: 1 V1

Inter-Site Error:

0.00

теприи.									11111-511		0.00	
Refe	rence	Of	fset	Semi-M	lajor Axis		Offset	Location	Ctr-Ctr	Edge	Separation	
MD	TVD	MD	TVD	Ref	Offset	TFO-HS		East			e Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
												<del></del>
100.00	100.00	107.26	107.26	0.11	0.12	298.53	155.76	-286.57	326.16	325.94	1442.15	
200.00	200.00	207.21	207.21	0.33	0.23	298.52	155.74	-286.60	326.18	325.62	580.17	
300.00	300.00	307.17	307.17	0.56				-286.65	326.21	325.32	363.16	
400.00	400.00	407.13	407.13	0.78				-286.72	326.26		264.32	
500.00	500.00	507.09	507.09	1.01				-286.81	326.32		207.79	
300.00	000.00	001.00	007.00	1.01	0.50	230.40	100.00	-200.01	020.02	024.10	2070	
600.00	600.00	607.05	607.05	1.23	0.60	298.47	4 <i>EE E7</i>	-286.93	326.39	224 42	171.20	
700.00	700.00	707.01	707.01	1.46					326.47		145.58	
800.00								-287.06				
	800.00	806.97	806.97	1.68				-287.21	326.57		126.64	
900.00	900.00	906.92	906.92	1.90				-287.38	326.68		112.08	
1000.00	1000.00	1006.88	1006.88	2.13	1.12	298.36	155.24	-287.57	326.80	323.55	100.53	
1100.00	1100.00	1106.84	1106.84	2.35				-287.78	326.93		91.15	
1200.00	1200.00	1206.80	1206.80	2.58	1.34	298.29	155.01	-288.02	327.08		83.38	
1300.00	1300.00	1306.76	1306.75	2.80	1.46	298.25	154.88	-288.27	327.24	322.98	76.83	
1400.00	1400.00	1406.71	1406.71	3.03				-288.54	327.41		71.25	
1500.00	1500.00	1506.34	1506.34	3.25				-288.76	327.62		66.02	
				0.20		200.10	101.70	200.10	02.1.02			
1600.00	1600.00	1602.96	1602.93	3.48	1 00	105.20	156 88	-288.26	328.30	322 93	61.07	
1700.00	1699.91	1695.49	1695.27	3.71				-287.61	331.81		57.37	
1800.00	1799.56								339.25		54.62	
		1787.07	1786.32	3.94				-286.88				
1900.00	1898.75	1874.79	1873.07	4.19				-285.68	351.24		52.77	
2000.00	1997.30	1955.22	1952.02	4.47	2.72	115.96	200.53	-285.46	370.26	363.15	52.06	
											4-	
2100.00	2095.02	2037.89	2032.59	4.78				-285.71	396.34		52.13	
2200.00	2191.71	2118.97	2111.14	5.14	3.31			-286.06	429.11		52.84	
2300.00	2287.21	2195.01	2184.45	5.56	3.62	126.81	259.30	-286.54	468.50	459.88	54.31	
2400.00	2381.32	2267.65	2254.04	6.04	3.96	129.70	280.10	-287.43	514.81	505.65	56.24	
2500.00	2473.87	2339.79	2322.85	6.60	4.31	132.35	301.78	-288.03	566.97		58.46	
2600.00	2564.85	2407.68	2387.22	7.23	4 66	135.18	323 31	-287.53	624.35	614.10	60.91	
2700.00	2655.54	2465.45	2441.61	7.90				-286.36	685.23		63.53	
2800.00	2746.24	2520.69	2493.13	8.60				-284.98	749.25		66.24	
2900.00	2836.93	2576.36	2544.67	9.31				-283.52	815.81		68.88	
3000.00	2927.63	2635.23	2598.84						884.38		71.43	
3000.00	2927.03	2033.23	∠ეყი.04	10.05	0.07	144.70	400.00	-282.06	004.30	012.00	71.43	
2400.00	2040.00	0000 04	0050.40	40.70	0.40	440.54	100.01	004.04	054.04	044.99	73.87	
3100.00	3018.32	2693.34	2652.19	10.79				-281.04	954.24			
3200.00	3109.02	2746.21	2700.48	11.55				-280.31	1025.56 1		76.29	
3300.00	3199.71	2807.61	2756.34	12.31				-279.73	1098.01 1		78.47	
3400.00	3290.41	2872.24	2815.12	13.08	7.71	150.89	503.52	-279.53	1170.94 1	156.39	80.46	

## Weatherford International, Ltd. **Anticollision Report**

Company: Field:

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

Date: 12/20/2007

Time: 10:03:42

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

PRICKLY PEAR UF #6-22D-12-15

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15

SITE 7199.7

Db: Sybase

Site: PRICKLY PEAR 3-22 PAD
Well: PRICKLY PEAR UF #11-15D-12-15
Wellpath: 1 V1

Inter-Site Error

0.00

Wellpath:	1 V1								Inter-Site	Error:	0.00	ft
Refe	erence	Of	ffset	Semi-M	lajor Axis		Offset	Location	Ctr-Ctr 1	Edge :	Separation	
MD	TVD	MD	TVD	Ref	Offset		S North	East	Distance 1			Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3500.00	3381.10	2937.88	2874.83	13.85	8 16	152.12	530.76	-279 73	1244.21 12	29 09	82.30	
7000.00	0001.10	2001.00	2014.00	10.00	0.10	102.12	000.70	-210.10	12-1-1.21 12	20.00	02.00	
3600.00	3471.80	3003.04	2934.13	14.63	8.62	153.20	557.78	-280.29	1317.73 13	02.04	84.00	
3700.00	3562.49	3067.53	2992.81	15.42	9.09	154.14	584.51	-281.16	1391.49 13	75.23	85.58	
3800.00	3653.19	3130.94	3050.47	16.21	9.56	154.98	610.87		1465.50 14	48.67	87.06	
3900.00	3743.88	3203.59	3116.58	17.00	10.08	155.83	640.97	-283.32	1539.57 15	22.14	88.31	
4000.00	3834.58	3276.87	3183.42	17.79	10.59	156.59	670.99	-284.91	1613.44 15	95.40	89.45	
4400.00	2005.07	2044.00	2045 47	40.50	44.00	457.00	200 50	000 74	4007 40 40	00.50	00 50	
4100.00 4200.00	3925.27	3344.80	3245.47	18.59		157.22	698.56		1687.16 16		90.56	
	4015.97	3404.00	3299.49	19.38		157.73	722.74		1761.14 17		91.72	
4300.00	4106.66	3465.58	3355.59	20.18		158.22		-289.70	1835.42 18		92.77	
4400.00	4197.36	3529.66	3413.92	20.98		158.68	774.55		1909.89 18		93.72	
4500.00	4288.05	3598.11	3476.24	21.79	12.91	159.14	802.80	-293.41	1984.38 19	63.40	94.57	
4600.00	4379.38	3670.08	3541.83	22.46	13 41	160.30	832.40	-294 62	2057.82 20	36.34	95.79	
4700.00	4472.08	3738.43	3604.16	22.98		161.32		-295.20	2128.94 21		97.11	
4800.00	4566.03	3806.18	3665.88	23.48		162.20	888.35		2197.88 21		98.28	
4900.00	4661.11	3878.75	3731.97	23.94		162.96	918.32		2264.49 22		99.26	
5000.00	4757.22	3975.07	3819.82	24.36		163.67			2328.32 23		99.81	
}		0070.01	0010102	0	10.00	100.01	001.10	200.00		••••		
5100.00	4854.24	4043.31	3882.13	24.75	16.14	164.23	985.61	-299.73	2389.37 23	65.65	100.73	
5200.00	4952.04	4128.05	3959.40	25.09	16.75	164.74	1020.36	-300.84	2447.95 24	23.80	101.35	
5300.00	5050.50	4200.73	4025.73	25.40	17.29	165.16	1050.04	-302.01	2503.63 24	79.11	102.09	
5400.00	5149.52	4259.16	4078.84	25.66	17.73	165.52	1074.39	-302.81	2557.25 25	32.43	103.04	
5500.00	5248.96	4375.22	4184.29	25.87				-304.81	2608.08 25	82.77	103.06	
5000.00	=0.40.=4		1000 00								400.00	
5600.00	5348.71	4544.01	4339.25	26.04			1189.58		2653.70 26		102.23	
5700.00	5448.64	4630.58	4419.17	26.17			1222.80		2695.24 26		102.61	
5800.00	5548.64	4725.62	4506.91	26.26	21.00		1259.32		2734.07 27		106.10	
5900.00	5648.64	4800.26	4575.76	26.36	21.51		1288.16		2772.72 27		105.87	
6000.00	5748.64	4868.08	4638.11	26.47	21.99	-0.21	1314.83	-311.23	2812.04 27	85.45	105.75	
6100.00	5848.64	4939.24	4703.26	26.58	22.50	_0.10	1343.43	-310 34	2852.21 28	25 20	105.60	
6200.00	5948.64	5035.22	4791.09	26.69	23.19	-0.18	1382.12	-308 03	2892.53 28		105.10	
6300.00	6048.64	5119.46	4868.17	26.80	23.81		1416.09		2932.86 29		104.77	
6400.00	6148.64	5182.37	4925.56	26.91	24.28		1441.85		2973.80 29		104.75	
6500.00	6248.64	5257.89	4994.20	27.02	24.26	-0.12	1473.33	-307.00	3015.47 29		104.76	
0300.00	0240.04	3237.09	4334.20	21.02	24.00	-0.12	1473.33	-307.08	3013.47 23	00.00	104.00	
6600.00	6348.64	5385.97	5110.72	27.14	25.83	-0.12	1526.50	-307.48	3057.08 30	27.59	103.66	
6700.00	6448.64	5477.29	5194.13	27.25	26.51	-0.15	1563.66	-308.76	3097.77 30	67.78	103.26	
6800.00	6548.64	5557.70	5267.51	27.37	27.11		1596.52		3138.65 31		103.02	
6900.00	6648.64	5678.23	5377.56	27.49	28.00		1645.62		3179.44 31	48.35	102.28	
7000.00	6748.64	5776.40	5467.47	27.61	28.70		1684.98		3219.55 31	87.94	101.83	
7400.00	0040.04	E077.40	EE00.44	07.70	00.46	0.00	4705.07	047.40	0050 45 00	07.00	101 26	
7100.00	6848.64	5877.46	5560.11	27.73	29.42	-0.30	1725.27	-317.48	3259.45 32		101.36	
7200.00	6948.64	6055.76	5724.31	27.86	30.67		1794.66		3298.74 32		100.06	
7300.00	7048.64	6151.35	5812.99	27.98	31.31	-0.39	1830.30	-322.45	3336.04 33	02.57	99.66	

PRICKLY PEAR 3-22 PAD

Well: PRICKLY PEAR UF #3-22-12-15

Wellpath: 1 V0

Inter-Site	Error:	0.00	π
 			_

Refe	rence	Off	fset	Semi-N	Tajor Axis	3	Offset	Location	Ctr-Ctr	Edge	Separation	
MID ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	Warning
100.00	100.00	107.30	107.30	0.11	0.11	304.71	165.94	-239.54	291.40	291.19	1373.10	
200.00	200.00	207.30	207.30	0.33	0.20	304.71	165.94	-239.54	291.40	290.87	544.40	
300.00	300.00	306.74	306.74	0.56	0.37	304.73	166.05	-239.54	291.46	290.53	314.19	
400.00	400.00	405.86	405.86	0.78					291.80	290.44	214.52	
	500.00	504.97	504.97	1.01				-239.54	292.45	290.65	163.11	
500.00	500.00	504.97	504.97	1.01	0.79	305.01	167.76	-239.54	292.45	290.65	163.11	



Company: Field:

BILL BARRETT CORP

CARBON COUNTY, UTAH

Date: 12/20/2007

Time: 10:03:42

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #6-22D-12-15

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15

SITE 7199.7

Db: Sybase

Site: Well:

PRICKLY PEAR 3-22 PAD PRICKLY PEAR UF #3-22-12-15

Well: Wellpath:		PEAR UF	#3-22-12-1	5					Inter-Sit	e Error:	0.00	ft
Refe	erence	Of	ffset	Semi-N	Aajor Axis	3	Offset	Location	Ctr-Ctr	Edge S	eparation	
MD	TVD	MD	TVD	Ref		TFO-HS		East		Distance		Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
600.00	600.00	604.07	604.05	1.23	0.99	305.27	169.40	-239.54	293.40	291.17	131.83	
700.00	700.00	703.15	703.10	1.46		305.61		-239.54	294.67		110.84	
800.00	800.00	802.82	802.74	1.68		306.02		-239.54	296.18		95.78	
900.00	900.00	902.79	902.67	1.90		306.42		-239.54	297.73		84.41	
1000.00	1000.00	1002.75	1002.60	2.13	1.83	306.83		-239.54	299.29		75.54	
1100.00	1100.00	1102.72	1102.53	2.35	2.04	307.23		-239.54	300.87		68.43	
1200.00	1200.00	1202.68	1202.47	2.58		307.62		-239.54	302.46	297.63	62.60	
1300.00	1300.00	1302.65	1302.40	2.80		308.01		-239.54	304.07		57.74	
1400.00	1400.00	1402.77	1402.48	3.03		308.40		-239.54	305.67		54.61	
1500.00	1500.00	1503.05	1502.73	3.25	2.57	308.76	192.29	-239.54	307.20	301.38	52.76	
1600.00	1600.00	1603.33	1602.00	2.40	0 E7	445 70	104 50	220 54	200 00	202 75	E4 06	
1700.00	1699.91	1703.46	1602.99 1703.10	3.48		115.73		-239.54	308.80		51.06	
1800.00	1799.56	1803.27	1802.88	3.71 3.94		116.61 118.11		-239.54 -239.54	311.89 316.99		49.70 48.72	
1900.00	1898.75	1903.27	1902.00	4.19		120.14		-239.54 -239.54	324.41		48.72 48.26	
2000.00	1997.30	2001.42	2001.01	4.19		120.14		-239.54 -239.65	334.47		46.26 49.32	
	1001.00	2001.72	2001.01	7.47	2.00	122.00	201.80	-200.00	00-111	UL1.00	70.02	
2100.00	2095.02	2099.53	2099.11	4.78	2.16	125.33	203.03	-239.93	347.52	340.67	50.67	
2200.00	2191.71	2196.79	2196.37	5.14		128.25		-240.37	363.94		52.34	
2300.00	2287.21	2293.06	2292.63	5.56		131.24		-240.98	384.04		54.32	
2400.00	2381.32	2388.20	2387.77	6.04	1.60	134.20	203.91	-241.74	408.07	400.86	56.61	
2500.00	2473.87	2481.19	2480.76	6.60	1.51	137.03		-242.69	436.26		58.55	
2600.00	2564.85	2572.26	2571.82	7.23		139.89		-243.99	468.63		60.27	
2700.00	2655.54	2663.24	2662.78	7.90				-245.69	502.76		61.96	
2800.00	2746.24	2754.39	2753.90	8.60		145.09		-247.78	537.87		63.66	
2900.00	2836.93	2845.72	2845.19	9.31		147.17		-250.27	573.75		65.33	
3000.00	2927.63	2937.22	2936.64	10.05	1.33	148.98	199.58	-253.16	610.22	601.10	66.96	
3100.00	3018.32	3029.45	3028.81	10.79	1 22	150.56	109 20	-256.42	647.12	637 66	68.40	
3200.00	3109.02	3122.53	3121.82	11.55		151.99		-259.68	684.23		69.61	
3300.00	3199.71	3215.75	3214.98	12.31				-262.83	721.47		70.76	
3400.00	3290.41	3309.13	3308.28	13.08		154.46		-265.88	758.78		71.86	
3500.00	3381.10	3402.64	3401.73	13.85		155.53		-268.81	796.13		72.90	
0000.00		0.102.0.	01010	10.00	1.00	100.00	101.70	200.01	700.10		. 2.00	
3600.00	3471.80	3496.31	3495.33	14.63	1.36	156.51	189.58	-271.64	833.50	822.22	73.89	
3700.00	3562.49	3589.73	3588.69	15.42	1.37	157.41	187.24	-274.34	870.86	859.21	74.80	
3800.00	3653.19	3681.61	3680.50	16.21	1.38	158.23	184.89	-276.97	908.32	896.31	75.61	
3900.00	3743.88	3773.49	3772.31	17.00		158.98		-279.61	945.94		76.39	
4000.00	3834.58	3865.36	3864.11	17.79	1.42	159.67	180.21	-282.25	983.70	970.95	77.13	
4400.00	2005.07	0057.00	0055.04	40.50		400.00	4== 00	004.00	4004 50 4	000.47	77.04	
4100.00	3925.27	3957.22	3955.91	18.59				-284.90	1021.59 1		77.84	
4200.00 4300.00	4015.97	4052.02	4050.62	19.38		160.93		-287.73	1059.51 1		78.02	
4400.00	4106.66 4197.36	4148.88 4246.18	4147.38 4244.55	20.18 20.98				-291.08	1097.14 1 1134.44 1		77.89 77.72	
			4244.55 4342.11			161.97 162.40		-294.94 -299.31	1134.44 1		77.72 77.52	
4500.00	+200.00	4343.82	4042.11	21.79	2.01	102.40	100.09	-∠⊎⊎.୬ ।	117 1.40 T	100.20	11.02	
4600.00	4379.38	4442.68	4440.65	22.46	2.17	162.96	160.68	-304.23	1206.59 1	190.99	77.33	
4700.00	4472.08	4543.07	4540.76	22.98		163.41		-309.75	1238.24 1		77.14	
4800.00	4566.03	4644.90	4642.26	23.48		163.74		-315.89	1266.27 1		76.78	
4900.00	4661.11	4747.99	4744.95	23.94		163.97		-322.65	1290.61 1	273.69	76.28	
5000.00	4757.22	4852.14	4848.61	24.36		164.10		-330.04	1311.21 1		75.66	
F400 00	405101	4055 ***				444			4000 04 1	040.00	7460	
5100.00	4854.24	4957.13	4953.05	24.75		164.13		-338.06	1328.04 1		74.92	
5200.00	4952.04	4997.00	4992.68	25.09		164.17		-341.25	1342.59 1		74.64	
5300.00	5050.50	5099.66	5094.93	25.40		164.14		-348.45	1354.41 1		74.13	
5400.00	5149.52	5162.77 5225.75	5157.95	25.66		164.17		-351.75	1366.45 1		73.84	
5500.00	5248.96	5225.75	5220.88	25.87	3.15	164.21	121.48	-354.19	1377.80 1	JJ8. 10	74.00	
5600.00	5348.71	5288.61	5283.67	26.04	3 18	164.25	123 87	-355.76	1388.43 1	369.65	73.90	
	55 .5.7 1	J_00.01	J200.01	20.07	3.10	.07.20	120.01	000.10	1000.70 1			



## **Anticollision Report**

Company: Field:

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH

Date: 12/20/2007

Time: 10:03:42

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #6-22D-12-15 Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15 SITE 7199.7

Db: Sybase

Well:

PRICKLY PEAR 3-22 PAD PRICKLY PEAR UF #3-22-12-15

Wellpath: 1 V0

Inter-Site Error:

0.00 ft

Γ	Refe	erence	Of	ffset	Semi-M	lajor Axis		Offset	Location	Ctr-Ctr	Edge	Separation		
	MD	TVD	MD	TVD	Ref	Offset	TFO-HS					e Factor	Warning	1
	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
	5700.00	5448.64	5372.00	5366.85	26.17	3.21	164.32	129.64	-356.51	1398.60 1	379.62	73.70		
	5800.00	5548.64	5372.00	5366.85	26.26	3.21	357.74	129.64	-356.51	1408.95 1	390.75	77.43		- 1
1	5900.00	5648.64	5372.00	5366.85	26.36	3.21	357.74	129.64	-356.51	1425.82 1	407.18	76.52		- 1
	6000.00	5748.64	5372.00	5366.85	26.47	3.21	357.74	129.64	-356.51	1449.40 1	430.34	76.05		
	6100.00	5848.64	5372.00	5366.85	26.58	3.21	357.74	129.64	-356.51	1479.39 1	459.92	75.97		ŀ
	6200.00	5948.64	5372.00	5366.85	26.69	3.21	357.74	129.64	-356.51	1515.39 1	495.52	76.26		
	6300.00	6048.64	5372.00	5366.85	26.80	3.21	357.74	129.64	-356.51	1556.99 1	536.74	76.87		
	6400.00	6148.64	5372.00	5366.85	26.91	3.21	357.74	129.64	-356.51	1603.76 1	583.14	77.76		
	6500.00	6248.64	5372.00	5366.85	27.02	3.21	357.74	129.64	-356.51	1655.25 1	634.28	78.91		
	6600.00	6348.64	5372.00	5366.85	27.14	3.21	357.74	129.64	-356.51	1711.05 1	689.73	80.28		
	6700.00	6448.64	5372.00	5366.85	27.25			129.64	-356.51	1770.73 1	749.10	81.84		- 1
	6800.00	6548.64	5372.00	5366.85	27.37		357.74	129.64	-356.51	1833.93 1	811.99	83.56		
	6900.00	6648.64	5372.00	5366.85	27.49		357.74	129.64	-356.51	1900.30 1	878.05	85.42		
	7000.00	6748.64	5372.00	5366.85	27.61		357.74	129.64	-356.51	1969.50 1		87.40		
l	7100.00	6848.64	5372.00	5366.85	27.73	3.21	357.74	129.64	-356.51	2041.27 20	N18 /5	89.48		- 1
	7200.00	6948.64	5372.00	5366.85	27.86			129.64	-356.51	2115.32 2		91.64		
	7300.00	7048.64	5372.00	5366.85	27.98				-356.51	2191.44 2		93.87		1
L	7000.00	7040.04	3372.00	3300.03	21.90	3.21	337.74	129.04	-300.01	2191.44 2	100.09	90.07		-

Site: Well: PRICKLY PEAR 3-22 PAD

PRICKLY PEAR UF #5-22D-12-15

Reference   MD	Wellpath:	4009174F	P V3							Inter-Sit	e Error:	0.00	ft	
ft         ft<			Of		Semi-M	lajor Axis	;	Offset	Location	Ctr-Ctr	Edge	Separation		
100.00 100.00 107.28 107.28 0.11 0.11 300.40 158.75 -270.61 313.73 313.52 1459.29 200.00 200.00 206.71 206.71 0.33 0.28 300.36 158.60 -270.76 313.80 313.19 516.05 300.00 300.00 306.41 306.41 0.56 0.48 300.34 158.65 -271.04 313.03 313.02 302.29 400.00 400.00 405.73 405.72 0.78 0.69 300.38 158.99 -271.25 314.41 312.94 213.69 500.00 500.00 505.70 505.70 1.01 0.90 300.44 159.57 -271.58 315.00 313.09 165.29 600.00 600.00 606.27 606.27 1.23 1.11 300.47 159.95 -271.83 315.40 313.06 134.97 7700.00 700.00 705.67 705.66 1.46 1.31 300.54 160.46 -271.97 315.78 313.01 114.00 800.00 800.00 805.15 805.14 1.68 1.53 300.63 161.23 -272.25 316.42 313.21 98.69 900.00 900.00 905.43 905.41 1.90 1.74 300.73 162.03 -272.56 317.09 313.45 87.05 1000.00 1000.00 1006.46 1006.45 2.13 1.95 300.81 162.61 -272.72 317.51 313.44 77.90 1100.00 1100.00 1106.85 1106.84 2.35 2.15 300.85 162.91 -272.72 317.51 313.44 77.90 1100.00 1200.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.93 312.99 64.33 130.00 1306.00 1406.98 1406.96 3.03 2.78 300.94 163.56 -272.83 317.96 312.99 64.77 1500.00 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 320.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2850.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 398.84 2200.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 386.45 371.8 348.00 2265.54 255.09 237.91 2337.16 6.04 5.79 101.59 49.66 400.65 418.76 407.08 358.4 2200.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 386.45 371.8 2200.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 386.45 371.8 2400.00 2855.54 2550.91 2513.30 7.23 6.07 101.59 49.66 40				TVD	Ref	Offset	TFO-HS	North	East	Distance	Distanc	e Factor	Warning	- 1
200.00 200.00 206.71 206.71 0.33 0.28 300.36 158.60 -270.76 313.80 313.19 516.05 300.00 300.00 306.41 306.41 0.56 0.48 300.34 158.65 -271.04 314.06 313.02 302.29 400.00 400.00 405.73 405.72 0.78 0.69 300.38 158.99 -271.25 314.41 312.94 213.69 500.00 500.00 505.70 505.70 1.01 0.90 300.44 159.57 -271.58 315.00 313.09 165.29 600.00 600.00 606.27 606.27 1.23 1.11 300.47 159.95 -271.83 315.00 313.00 165.29 600.00 700.00 705.67 705.66 1.46 1.31 300.54 160.46 -271.97 315.78 313.01 114.00 800.00 800.00 805.15 805.14 1.68 1.53 300.63 161.23 -272.25 316.42 313.21 98.69 900.00 900.00 905.43 905.41 1.90 1.74 300.73 162.03 -272.56 317.09 313.45 87.05 1000.00 1000.00 1006.46 1006.45 2.13 1.95 300.81 162.61 -272.72 317.51 313.44 77.90 1100.00 1100.00 1106.85 1106.84 2.35 2.15 300.85 162.91 -272.77 317.23 313.21 70.48 1200.00 1200.00 1200.69 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1400.00 1406.98 1406.96 3.03 2.78 300.90 163.29 -272.83 318.10 312.29 54.77 1500.00 1500.00 1507.09 1507.00 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.74 3.06 3105.37 147.22 -289.06 327.23 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.23 20.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
200.00 200.00 206.71 206.71 0.33 0.28 300.36 158.60 -270.76 313.80 313.19 516.05 300.00 300.00 300.64 1306.41 0.56 0.48 300.34 158.65 -271.04 314.06 313.02 302.29 400.00 400.00 405.73 405.72 0.78 0.68 300.38 158.99 -271.25 314.41 312.94 213.69 500.00 500.00 505.70 505.70 1.01 0.90 300.44 159.57 -271.58 315.00 313.09 165.29 600.00 600.00 600.00 606.27 606.27 1.23 1.11 300.47 159.95 -271.83 315.40 313.06 134.97 7700.00 700.00 705.67 705.66 1.46 1.31 300.54 160.46 -271.97 315.78 313.01 114.00 800.00 800.01 805.15 805.14 1.68 1.53 300.63 161.23 -272.25 316.42 313.21 98.69 900.00 900.00 905.43 905.41 1.90 1.74 300.73 162.03 -272.55 316.42 313.44 77.90 1100.00 1100.00 1100.646 1006.45 2.13 1.95 300.81 162.61 -272.72 317.09 313.45 87.05 1100.00 1200.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1300.82 1306.81 2.80 2.57 300.90 163.29 -272.83 317.96 312.59 59.17 1400.00 1400.00 1406.98 1406.96 3.03 2.78 300.94 163.56 -272.82 317.95 312.29 54.77 1500.00 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1609.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 300.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 200.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.99 41.10 2100.00 2267.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2361.32 2359.39 2337.16 6.04 5.79 101.54 4.55.15 463.24 449.24 33.17 2200.00 2655.54 255.53 255.51 255.51 255.51 200.75 485.64 4	100.00	100.00	107.28	107.28	0.11	0.11	300.40	158.75	-270.61	313.73	313.52	1459.29		
400.00	200.00	200.00	206.71	206.71	0.33	0.28	300.36			313.80	313.19	516.05		
500.00         500.00         505.70         505.70         1.01         0.90         300.44         159.57         -271.58         315.00         313.09         165.29           600.00         600.00         606.27         606.27         1.23         1.11         300.47         159.95         -271.83         315.40         313.06         134.97           700.00         700.00         705.67         705.66         1.46         1.51         300.63         160.46         -271.97         315.78         313.01         114.00           800.00         800.01         805.15         805.14         1.68         1.53         300.63         161.23         -272.25         316.42         313.21         98.69           900.00         900.00         905.43         905.41         1.90         1.74         300.73         162.03         -272.56         317.09         313.44         77.90           1100.00         1100.00         1106.85         1106.84         2.35         2.15         300.85         162.91         -272.77         317.72         313.21         70.48           1200.00         1206.96         1206.94         2.58         2.36         300.86         163.05         -272.82         317.83	300.00	300.00	306.41	306.41	0.56	0.48	300.34	158.65	-271.04	314.06	313.02	302.29		
600.00 600.00 606.27 606.27 1.23 1.11 300.47 159.95 -271.83 315.40 313.06 134.97 700.00 700.00 705.67 705.66 1.46 1.31 300.54 160.46 -271.97 315.78 313.01 114.00 800.00 800.00 805.15 805.14 1.68 1.53 300.63 161.23 -272.25 316.42 313.21 98.69 900.00 900.00 905.43 905.41 1.90 1.74 300.73 162.03 -272.56 317.09 313.45 87.05 1000.00 1000.00 1006.46 1006.45 2.13 1.95 300.81 162.61 -272.75 317.51 313.44 77.90 1100.00 1100.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.83 317.96 312.59 64.33 1300.00 1300.00 1406.82 1306.81 2.80 2.57 300.90 163.29 -272.83 317.96 312.59 59.17 1400.00 1400.00 1400.88 1406.96 3.03 2.78 300.94 163.56 -272.83 318.10 312.29 54.77 1500.00 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 320.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.66 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2095.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 39.88 2200.00 2191.71 2173.69 2162.03 5.14 4.86 102.62 92.65 -356.19 382.16 372.25 38.54 2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 33.50 2500.00 2655.54 2651.53 2656.81 7.90 7.56 101.78 -29.31 483.65 485.76 470.57 31.98		400.00	405.73	405.72	0.78	0.69	300.38	158.99	-271.25	314.41	312.94	213.69		
700.00         700.00         705.67         705.66         1.46         1.31         300.54         160.46         -271.97         315.78         313.01         114.00           800.00         800.00         805.15         805.14         1.68         1.53         300.63         161.23         -272.25         316.42         313.21         98.69           900.00         900.00         905.43         905.41         1.90         1.74         300.73         162.02         -272.25         316.42         313.45         87.05           1000.00         1000.04         1006.46         1006.45         2.13         1.95         300.81         162.61         -272.72         317.51         313.44         77.90           1100.00         1100.00         1206.96         1206.94         2.58         2.36         300.86         163.05         -272.82         317.83         312.89         64.33           1300.00         1300.00         1306.82         1306.81         2.80         2.57         300.90         163.29         -272.83         317.96         312.59         59.17           1400.00         1400.00         1400.00         1507.09         1507.08         3.25         2.99         300.90 <td< td=""><td>500.00</td><td>500.00</td><td>505.70</td><td>505.70</td><td>1.01</td><td>0.90</td><td>300.44</td><td>159.57</td><td>-271.58</td><td>315.00</td><td>313.09</td><td>165.29</td><td></td><td></td></td<>	500.00	500.00	505.70	505.70	1.01	0.90	300.44	159.57	-271.58	315.00	313.09	165.29		
700.00         705.67         705.66         1.46         1.31         300.54         160.46         -271.97         315.78         313.01         114.00           800.00         800.15         805.14         1.68         1.53         300.63         161.23         -272.25         316.42         313.21         98.69           900.00         900.00         905.43         905.41         1.90         1.74         300.73         162.03         -272.25         316.42         313.21         98.69           1000.00         1000.00         1006.46         1006.45         2.13         1.95         300.81         162.61         -272.72         317.51         313.44         77.90           1100.00         1100.00         1106.85         1106.84         2.35         2.15         300.85         162.91         -272.77         317.72         313.21         70.48           1200.00         1206.96         1206.94         2.58         2.36         300.86         163.05         -272.83         317.83         312.89         64.33           1300.00         1300.00         1406.09         1406.09         3.03         3.278         300.90         163.29         -272.83         318.10         312.29 <td< td=""><td>600.00</td><td>600.00</td><td>606.27</td><td>606.27</td><td>1.23</td><td>1.11</td><td>300.47</td><td>159.95</td><td>-271.83</td><td>315.40</td><td>313.06</td><td>134.97</td><td></td><td></td></td<>	600.00	600.00	606.27	606.27	1.23	1.11	300.47	159.95	-271.83	315.40	313.06	134.97		
900.00 900.00 905.43 905.41 1.90 1.74 300.73 162.03 -272.56 317.09 313.45 87.05 1000.00 1000.00 1006.46 1006.45 2.13 1.95 300.81 162.61 -272.72 317.51 313.44 77.90 1100.00 1100.00 1106.85 1106.84 2.35 2.15 300.85 162.91 -272.77 317.72 313.21 70.48 1200.00 1200.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1306.82 1306.81 2.80 2.57 300.90 163.29 -272.83 317.96 312.59 59.17 1400.00 1400.00 1406.98 1406.96 3.03 2.78 300.90 163.29 -272.83 318.10 312.29 54.77 1500.00 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 320.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2095.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 39.88 2200.00 2191.71 2173.69 2162.03 5.14 4.86 102.62 92.65 -356.19 382.16 372.25 38.54 2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2565.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	700.00	700.00	705.67	705.66	1.46			160.46	-271.97	315.78	313.01	114.00		
1000.00       1006.46       1006.45       2.13       1.95       300.81       162.61       -272.72       317.51       313.44       77.90         1100.00       1100.00       1106.85       1106.84       2.35       2.15       300.85       162.91       -272.77       317.72       313.21       70.48         1200.00       1200.00       1206.96       1206.94       2.58       2.36       300.86       163.05       -272.82       317.83       312.89       64.33         1300.00       1300.00       1306.82       1306.81       2.80       2.57       300.90       163.29       -272.83       317.96       312.59       59.17         1400.00       1400.00       1406.98       1406.96       3.03       2.78       300.94       163.56       -272.83       318.10       312.59       59.17         1500.00       1500.00       1507.09       1507.08       3.25       2.99       300.90       163.42       -273.01       318.18       311.94       50.96         1600.00       1603.42       1603.35       3.48       3.20       107.03       161.11       -274.79       318.66       311.99       47.75         1700.00       1699.91       1698.20       1697.78 <td>800.00</td> <td>800.00</td> <td>805.15</td> <td>805.14</td> <td>1.68</td> <td>1.53</td> <td>300.63</td> <td>161.23</td> <td>-272.25</td> <td>316.42</td> <td>313.21</td> <td>98.69</td> <td></td> <td></td>	800.00	800.00	805.15	805.14	1.68	1.53	300.63	161.23	-272.25	316.42	313.21	98.69		
1100.00 1100.00 1106.85 1106.84 2.35 2.15 300.85 162.91 -272.77 317.72 313.21 70.48 1200.00 1200.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1306.82 1306.81 2.80 2.57 300.90 163.29 -272.83 317.96 312.59 59.17 1400.00 1400.00 1406.98 1406.96 3.03 2.78 300.94 163.56 -272.83 318.10 312.29 54.77 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 320.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2095.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 39.88 2200.00 2191.71 2173.69 2162.03 5.14 4.86 102.62 92.65 -356.19 382.16 372.25 38.54 2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	900.00	900.00	905.43	905.41	1.90	1.74	300.73	162.03	-272.56	317.09	313.45	87.05		-
1200.00 1200.00 1206.96 1206.94 2.58 2.36 300.86 163.05 -272.82 317.83 312.89 64.33 1300.00 1300.00 1306.82 1306.81 2.80 2.57 300.90 163.29 -272.83 317.96 312.59 59.17 1400.00 1400.00 1406.98 1406.96 3.03 2.78 300.94 163.56 -272.83 318.10 312.29 54.77 1500.00 1507.09 1507.08 3.25 2.99 300.90 163.42 -273.01 318.18 311.94 50.96 1600.00 1600.00 1603.42 1603.35 3.48 3.20 107.03 161.11 -274.79 318.66 311.99 47.75 1700.00 1699.91 1698.20 1697.78 3.71 3.40 106.22 155.55 -280.45 322.01 314.91 45.31 1800.00 1799.56 1792.97 1791.79 3.94 3.63 105.37 147.22 -289.06 327.92 320.36 43.37 1900.00 1898.75 1881.23 1878.88 4.19 3.86 104.69 138.07 -300.08 337.26 329.24 42.02 2000.00 1997.30 1973.45 1969.12 4.47 4.12 104.11 127.80 -315.99 351.45 342.90 41.10 2100.00 2095.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 39.88 2200.00 2191.71 2173.69 2162.03 5.14 4.86 102.62 92.65 -356.19 382.16 372.25 38.54 2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	1000.00	1000.00	1006.46	1006.45	2.13	1.95	300.81	162.61	-272.72	317.51	313.44	77.90		-
1200.00       1206.96       1206.94       2.58       2.36       300.86       163.05       -272.82       317.83       312.89       64.33         1300.00       1300.00       1306.82       1306.81       2.80       2.57       300.90       163.29       -272.83       317.96       312.59       59.17         1400.00       1400.00       1406.98       1406.96       3.03       2.78       300.90       163.56       -272.83       318.10       312.29       54.77         1500.00       1500.00       1507.09       1507.08       3.25       2.99       300.90       163.42       -273.01       318.18       311.94       50.96         1600.00       1600.01       1603.42       1603.35       3.48       3.20       107.03       161.11       -274.79       318.66       311.99       47.75         1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -280.6       327.22       320.36       43.37         1900.00       1898.75       1881.23	1100.00	1100.00	1106.85	1106.84	2.35	2.15	300.85	162.91	-272.77	317.72	313.21	70.48		
1400.00       1406.98       1406.96       3.03       2.78       300.94       163.56       -272.83       318.10       312.29       54.77         1500.00       1507.09       1507.08       3.25       2.99       300.90       163.42       -273.01       318.18       311.94       50.96         1600.00       1600.00       1603.42       1603.35       3.48       3.20       107.03       161.11       -274.79       318.66       311.99       47.75         1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -289.06       327.92       320.36       43.37         1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42 <td>1200.00</td> <td>1200.00</td> <td>1206.96</td> <td>1206.94</td> <td>2.58</td> <td>2.36</td> <td></td> <td></td> <td></td> <td>317.83</td> <td>312.89</td> <td>64.33</td> <td></td> <td>- 1</td>	1200.00	1200.00	1206.96	1206.94	2.58	2.36				317.83	312.89	64.33		- 1
1400.00       1406.98       1406.96       3.03       2.78       300.94       163.56       -272.83       318.10       312.29       54.77         1500.00       1500.00       1507.09       1507.08       3.25       2.99       300.90       163.42       -273.01       318.18       311.94       50.96         1600.00       1600.00       1603.42       1603.35       3.48       3.20       107.03       161.11       -274.79       318.66       311.99       47.75         1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -289.06       327.92       320.36       43.37         1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92 <td>1300.00</td> <td>1300.00</td> <td>1306.82</td> <td>1306.81</td> <td>2.80</td> <td>2.57</td> <td>300.90</td> <td>163.29</td> <td>-272.83</td> <td>317.96</td> <td>312.59</td> <td>59.17</td> <td></td> <td>- 1</td>	1300.00	1300.00	1306.82	1306.81	2.80	2.57	300.90	163.29	-272.83	317.96	312.59	59.17		- 1
1600.00       1600.00       1603.42       1603.35       3.48       3.20       107.03       161.11       -274.79       318.66       311.99       47.75         1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -289.06       327.92       320.36       43.37         1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42       4.78       4.47       103.36       111.93       -335.45       366.37       357.18       39.88         2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21	1400.00	1400.00	1406.98	1406.96	3.03	2.78	300.94	163.56	-272.83	318.10	312.29	54.77		
1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -289.06       327.92       320.36       43.37         1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42       4.78       4.47       103.36       111.93       -335.45       366.37       357.18       39.88         2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21       2267.80       2251.38       5.56       5.30       102.08       72.03       -377.36       399.19       388.45       37.18         2400.00       2381.32	1500.00	1500.00	1507.09	1507.08	3.25	2.99	300.90	163.42	-273.01	318.18	311.94	50.96		
1700.00       1699.91       1698.20       1697.78       3.71       3.40       106.22       155.55       -280.45       322.01       314.91       45.31         1800.00       1799.56       1792.97       1791.79       3.94       3.63       105.37       147.22       -289.06       327.92       320.36       43.37         1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42       4.78       4.47       103.36       111.93       -335.45       366.37       357.18       39.88         2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21       2267.80       2251.38       5.56       5.30       102.08       72.03       -377.36       399.19       388.45       37.18         2400.00       2381.32	1600.00	1600.00	1603.42	1603.35	3.48	3.20	107.03	161.11	-274.79	318.66	311.99	47.75		
1900.00       1898.75       1881.23       1878.88       4.19       3.86       104.69       138.07       -300.08       337.26       329.24       42.02         2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42       4.78       4.47       103.36       111.93       -335.45       366.37       357.18       39.88         2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21       2267.80       2251.38       5.56       5.30       102.08       72.03       -377.36       399.19       388.45       37.18         2400.00       2381.32       2359.39       2337.16       6.04       5.79       101.59       49.96       -400.65       418.76       407.08       35.87         2500.00       2473.87       2453.41       2423.83       6.60       6.36       101.13       24.86       -427.04       440.40       427.64       34.50         2600.00       2564.85	1700.00	1699.91	1698.20	1697.78	3.71	3.40	106.22	155.55	-280.45	322.01	314.91	45.31		İ
2000.00       1997.30       1973.45       1969.12       4.47       4.12       104.11       127.80       -315.99       351.45       342.90       41.10         2100.00       2095.02       2074.92       2067.42       4.78       4.47       103.36       111.93       -335.45       366.37       357.18       39.88         2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21       2267.80       2251.38       5.56       5.30       102.08       72.03       -377.36       399.19       388.45       37.18         2400.00       2381.32       2359.39       2337.16       6.04       5.79       101.59       49.96       -400.65       418.76       407.08       35.87         2500.00       2473.87       2453.41       2423.83       6.60       6.36       101.13       24.86       -427.04       440.40       427.64       34.50         2600.00       2564.85       2550.91       2513.30       7.23       6.97       101.24       -1.84       -455.15       463.21       449.24       33.17         2700.00       2655.54	1800.00	1799.56	1792.97	1791.79	3.94	3.63	105.37	147.22	-289.06	327.92	320.36	43.37		
2100.00 2095.02 2074.92 2067.42 4.78 4.47 103.36 111.93 -335.45 366.37 357.18 39.88 2200.00 2191.71 2173.69 2162.03 5.14 4.86 102.62 92.65 -356.19 382.16 372.25 38.54 2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	1900.00	1898.75	1881.23	1878.88	4.19	3.86	104.69	138.07	-300.08	337.26	329.24	42.02		
2200.00       2191.71       2173.69       2162.03       5.14       4.86       102.62       92.65       -356.19       382.16       372.25       38.54         2300.00       2287.21       2267.80       2251.38       5.56       5.30       102.08       72.03       -377.36       399.19       388.45       37.18         2400.00       2381.32       2359.39       2337.16       6.04       5.79       101.59       49.96       -400.65       418.76       407.08       35.87         2500.00       2473.87       2453.41       2423.83       6.60       6.36       101.13       24.86       -427.04       440.40       427.64       34.50         2600.00       2564.85       2550.91       2513.30       7.23       6.97       101.24       -1.84       -455.15       463.21       449.24       33.17         2700.00       2655.54       2651.53       2605.81       7.90       7.56       101.78       -29.31       -483.65       485.76       470.57       31.98	2000.00	1997.30	1973.45	1969.12	4.47	4.12	104.11	127.80	-315.99	351.45	342.90	41.10		
2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	2100.00	2095.02	2074.92	2067.42	4.78	4.47	103.36	111.93	-335.45	366.37	357.18	39.88		
2300.00 2287.21 2267.80 2251.38 5.56 5.30 102.08 72.03 -377.36 399.19 388.45 37.18 2400.00 2381.32 2359.39 2337.16 6.04 5.79 101.59 49.96 -400.65 418.76 407.08 35.87 2500.00 2473.87 2453.41 2423.83 6.60 6.36 101.13 24.86 -427.04 440.40 427.64 34.50 2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	2200.00	2191.71	2173.69	2162.03	5.14	4.86	102.62	92.65	-356.19	382.16	372.25	38.54		
2400.00       2381.32       2359.39       2337.16       6.04       5.79       101.59       49.96       -400.65       418.76       407.08       35.87         2500.00       2473.87       2453.41       2423.83       6.60       6.36       101.13       24.86       -427.04       440.40       427.64       34.50         2600.00       2564.85       2550.91       2513.30       7.23       6.97       101.24       -1.84       -455.15       463.21       449.24       33.17         2700.00       2655.54       2651.53       2605.81       7.90       7.56       101.78       -29.31       -483.65       485.76       470.57       31.98	2300.00	2287.21		2251.38	5.56							37.18		
2600.00 2564.85 2550.91 2513.30 7.23 6.97 101.24 -1.84 -455.15 463.21 449.24 33.17 2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	2400.00	2381.32	2359.39	2337.16	6.04					418.76	407.08	35.87		- 1
2700.00 2655.54 2651.53 2605.81 7.90 7.56 101.78 -29.31 -483.65 485.76 470.57 31.98	2500.00	2473.87	2453.41	2423.83	6.60	6.36	101.13	24.86	-427.04	440.40	427.64	34.50		
			2550.91	2513.30	7.23	6.97	101.24							
2800.00 2746.24 2754.05 2700.50 8.60 8.17 102.37 -56.99 -511.54 507.51 491.04 30.82		2655.54	2651.53	2605.81	7.90	7.56	101.78	-29.31	<b>-483.65</b>					
	2800.00	2746.24	2754.05	2700.50	8.60	8.17	102.37	-56.99	-511.54	507.51	491.04	30.82		



Date:

Company: Field: Reference Site:

Reference Well:

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #6-22D-12-15 Reference Wellpath: 1

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

12/20/2007

Time: 10:03:42

Page:

Well: PRICKLY PEAR UF #6-22D-12-15 SITE 7199.7

Db: Sybase

PRICKLY PEAR 3-22 PAD PRICKLY PEAR UF #5-22D-12-15

Well:

Reference   MD	Wel	llpath:	4009174F	V3	"O EED 12						Inter-Sit	e Error:	0.00	ft	
MID   TVD   Tt   TvD   Ref   tr   tr   tr   tr   tr   tr   tr   t		Refe	rence	Of	fset	Semi-M	laior Axis		Offset	Location	Ctr-Ctr	Edge	Separation		
2800.00 2836.83 2855.92 2794.55 9.31 8.81 102.88 -85.29 -538.57 528.35 510.57 29.71 3000.00 2827.63 2945.47 2877.19 10.05 9.39 103.28 -110.11 -562.51 549.45 530.38 28.81 3100.00 3018.22 3056.88 2979.07 10.79 10.16 103.55 -142.41 -593.21 570.75 550.20 277.78 3200.00 3109.02 3138.53 3072.42 11.55 10.84 103.74 -173.33 -819.75 550.05 558.09 26.67 3300.00 3198.71 3257.10 3163.23 12.31 11.49 10.40.2 -202.49 -844.66 609.03 585.68 26.10 3400.00 230.04 13.85 13.08 12.15 104.15 2.316.4 689.51 642.24 621.55 24.74 521.55 10.37 29.04 13.25 10.38 12.31 11.49 10.40.2 -202.49 -844.66 609.03 585.69 26.10 3500.00 381.10 3449.56 3399.04 13.85 12.85 104.19 -261.99 -895.51 647.74 621.55 24.77 3300.00 3741.80 3466.63 3427.71 44.83 13.51 104.27 2.91 2.92 -272.14 0.67 4.0 639.0 24.18 3700.00 3562.49 364.467 3517.44 15.42 14.22 104.35 322.04 -744.62 887.06 687.99 23.64 3300.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 322.04 -744.62 887.06 687.99 23.64 3900.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 362.51 800.34 728.90 604.44 22.68 4000.00 3845.85 3933.31 3779.59 17.79 16.41 104.32 412.53 828.65 747.18 713.65 22.88 4000.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 4971.6 880.36 787.81 751.35 21.60 4400.00 416.97 4132.30 3961.87 19.38 17.82 104.57 4971.6 880.36 787.81 751.35 21.60 4400.00 419.73 432.35 4145.90 2.0 18 18.54 104.73 8-90.91 90.84 68 607.83 769.8 21.29 4400.00 419.73 432.35 4145.90 2.0 18 18.54 104.73 8-90.91 90.84 68 607.83 769.8 21.29 4400.00 419.73 4400.04 4236.16 21.79 19.94 105.15 -558.86 -980.98 866.50 824.34 20.55 4400.00 475.26 422.52 449.00 4236.16 21.79 19.94 105.15 -558.86 -980.98 866.50 824.34 20.55 4400.00 4852.04 5122.43 4872.77 25.86 25.91 103.33 -764.39 110.84 990.39 19.17 19.80 10.50		MD	TVD	MD	TVD									Warning	
3000.00 2927.63 2945.47 2877.19 10.05 9.39 103.28 -110.11 -562.51 548.45 530.36 28.81  3100.00 3018.32 3056.68 2979.07 10.79 10.16 103.55 -142.41 -589.21 570.75 550.20 27.78  3200.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3471.80 354.66 3 339.04 13.85 12.85 104.19 -261.99 -695.51 647.74 621.55 24.74  3600.00 3471.80 354.66 3 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18  3700.00 3652.49 3644.87 3517.44 15.42 14.22 104.35 -322.44 -747.62 687.06 687.06 687.90 23.64  3800.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 -351.81 -773.60 706.92 676.37 23.14  3900.00 3743.88 3838.0 3693.15 17.00 15.70 104.55 -382.51 -800.34 728.90 684.82 22.68  4000.00 3825.27 4031.55 3869.30 18.59 17.11 104.32 -412.53 -826.85 747.18 713.65 22.28  4100.00 3925.27 4031.55 3869.30 18.59 17.11 104.32 -412.53 -826.85 747.18 713.65 22.28  4400.00 4105.97 4132.30 3961.87 19.38 17.82 104.57 -747.6 -880.36 787.81 751.3 21.60  4300.00 4706.66 4231.49 4053.02 20.18 18.54 104.77 6-880.36 865.24 827.54 789.82 21.29  4400.00 4797.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -960.98 866.50 824.34 20.55  4400.00 4797.38 4522.60 20.98 19.25 104.52 -530.34 -932.51 18.27.54 78.98 21.29  4400.00 4797.38 4522.60 423.66 21.79 19.94 105.15 -558.36 -967.22 847.05 806.17 20.72  4600.00 4797.38 4522.60 422.61 421.63 22.98 21.31 105.84 61.32 -1007.08 868.62 842.52 -50.43  4800.00 4766.61 17 68.63 84.59 17 11 104.32 -104.78 -80.93 868.65 824.34 20.55  4800.00 4768.64 509.66 476.61 24.75 29.99 24.95 10.53 1 675.33 106.10 3 991.78 874.00 20.19  4600.00 477.32 86.22 86.86 4597.37 25.99 24.95 10.82 10.53 1 675.33 106.10 3 991.78 874.00 20.19  5700.00 548.64 509.64 509.65 509.65 509.65 509.65 509.65 509.05 509.85 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 5		ft	ft	ft	ft	ft					ft	ft		•	1
3000.00 2927.63 2945.47 2877.19 10.05 9.39 103.28 -110.11 -562.51 548.45 530.36 28.81  3100.00 3018.32 3056.68 2979.07 10.79 10.16 103.55 -142.41 -589.21 570.75 550.20 27.78  3200.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -202.49 -644.66 609.03 585.69 26.10  3300.00 3471.80 354.66 3 339.04 13.85 12.85 104.19 -261.99 -695.51 647.74 621.55 24.74  3600.00 3471.80 354.66 3 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18  3700.00 3652.49 3644.87 3517.44 15.42 14.22 104.35 -322.44 -747.62 687.06 687.06 687.90 23.64  3800.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 -351.81 -773.60 706.92 676.37 23.14  3900.00 3743.88 3838.0 3693.15 17.00 15.70 104.55 -382.51 -800.34 728.90 684.82 22.68  4000.00 3825.27 4031.55 3869.30 18.59 17.11 104.32 -412.53 -826.85 747.18 713.65 22.28  4100.00 3925.27 4031.55 3869.30 18.59 17.11 104.32 -412.53 -826.85 747.18 713.65 22.28  4400.00 4105.97 4132.30 3961.87 19.38 17.82 104.57 -747.6 -880.36 787.81 751.3 21.60  4300.00 4706.66 4231.49 4053.02 20.18 18.54 104.77 6-880.36 865.24 827.54 789.82 21.29  4400.00 4797.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -960.98 866.50 824.34 20.55  4400.00 4797.38 4522.60 20.98 19.25 104.52 -530.34 -932.51 18.27.54 78.98 21.29  4400.00 4797.38 4522.60 423.66 21.79 19.94 105.15 -558.36 -967.22 847.05 806.17 20.72  4600.00 4797.38 4522.60 422.61 421.63 22.98 21.31 105.84 61.32 -1007.08 868.62 842.52 -50.43  4800.00 4766.61 17 68.63 84.59 17 11 104.32 -104.78 -80.93 868.65 824.34 20.55  4800.00 4768.64 509.66 476.61 24.75 29.99 24.95 10.53 1 675.33 106.10 3 991.78 874.00 20.19  4600.00 477.32 86.22 86.86 4597.37 25.99 24.95 10.82 10.53 1 675.33 106.10 3 991.78 874.00 20.19  5700.00 548.64 509.64 509.65 509.65 509.65 509.65 509.65 509.05 509.85 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 509.30 10.65 5	290	00.00	2836.93	2855.92	2794.55	9.31	8 81	102.88	-85 29	-538 57	528 35	510 57	29 71		
3100.00 3018.32 3056.68 2979.07 10.79 10.16 103.55 -142.41 -593.21 570.75 550.20 27.78 3200.00 3199.02 3158.53 3072.42 11.55 10.84 103.74 -173.33 -819.76 590.05 568.09 26.87 3300.00 3199.71 3257.10 3163.23 12.31 11.49 104.02 -20.49 -844.66 609.03 565.09 26.10 3400.00 3290.41 3352.41 3250.48 13.08 12.15 104.15 -231.64 -669.51 628.24 603.50 25.39 3500.00 3381.10 3449.56 3339.04 13.85 12.85 104.19 -261.99 -695.51 647.74 621.55 24.74 4 3600.00 3471.80 3566.63 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18 3700.00 3562.49 3644.87 3517.44 15.42 14.22 104.35 322.04 -747.62 687.06 657.99 23.64 3900.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 332.24 -474.62 687.06 657.99 23.64 3900.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 332.24 -474.62 687.06 657.99 23.64 3900.00 3743.88 3933.31 3779.59 17.79 16.41 104.32 -412.53 -826.85 747.18 713.65 22.88 1400.00 3825.27 4031.65 3869.30 18.59 17.11 104.39 442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.67 -477.68 -800.36 787.81 751.35 21.60 4300.00 470.66 4231.49 4053.00 20.18 18.54 104.73 -500.91 -906.46 60 4231.49 4053.00 20.18 18.54 104.73 -500.91 -906.46 60 4231.49 4053.00 20.18 18.54 104.73 -500.91 -906.46 60 4231.49 4053.00 20.18 18.54 104.73 -500.91 -906.46 60 4231.49 4053.00 20.18 18.54 104.73 -500.91 -906.46 807.83 769.83 21.29 4400.00 4797.36 4320.44 472.08 4621.62 4412.80 22.98 21.31 105.84 613.25 -1007.08 885.62 442.26 20.43 4800.00 475.07 432.30 472.41 472.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 613.25 -1007.08 885.62 442.26 20.43 4800.00 475.27 482.52 4825.63 4869.53 24.46 22.00 105.31 675.33 -1061.03 919.47 874.01 20.11 50.00 475.22 4825.25 4890.53 24.36 22.66 24.67 60.53 476.35 910.47 910.47 910.54 910.47 910.															
3200.00 3199.70 3158.53 3072.42 11.55 10.84 103.74 -173.33 -619.76 660.05 568.09 26.10 3300.00 3199.71 3257.10 3163.23 12.31 11.49 10.402 -202.49 -844.66 609.03 5858.69 26.10 3400.00 3290.41 3352.41 3250.48 13.08 12.15 104.19 -2619.99 -695.51 628.24 603.50 25.39 3500.00 3471.80 3546.63 3439.04 13.85 12.85 104.19 -2619.99 -695.51 647.74 621.55 24.74 3600.00 3471.80 3546.63 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18 3700.00 3562.49 3644.87 3517.44 15.42 14.22 104.35 322.04 -747.62 887.08 657.99 23.64 3800.00 3653.19 374.90 3604.98 16.21 14.95 104.32 -321.64 -747.62 887.08 657.99 23.64 3800.00 3743.88 3838.03 3893.15 17.00 15.70 104.35 382.51 -800.34 726.90 694.84 22.68 4000.00 3825.27 4031.56 3869.30 17.79 16.41 104.35 -382.51 -800.34 726.90 694.84 22.68 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4300.00 4196.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4219.73 432.35 4435.00 20.88 145.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4479.36 4332.35 4145.90 29.98 19.25 104.92 -830.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 558.36 -897.22 87.47 88.11 20.99 4500.00 4472.08 4621.62 4472.80 22.98 21.31 105.84 613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.83 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.72 20.72 4925.25 4925.25 4905.33 24.36 23.54 104.78 -706.01 1087.43 935.27 888.41 19.96 500.00 4586.03 4724.11 4506.83 23.48 22.09 106.31 -673.33 1061.03 919.74 874.01 20.11 99.96 500.00 4584.24 502.04 5122.43 4872.37 25.90 24.95 106.33 -764.39 1113.78 98.89 99.16 97.19 19.95 500.00 548.64 680.00 4566.03 478.64 52.75 68 62.75 68.80 69.75 23 97.55 697.17 1254.54 680.00 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.80 91.57 19.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.50 91.															
3300.00 3199.71 3257.10 3169.223 12.31 11.49 104.02 -202.49 -644.66 609.03 585.89 26.10 3400.00 3290.41 3352.41 3250.48 13.08 12.15 104.15 -231.84 -660.51 628.24 603.50 25.39 3500.00 37471.60 3546.63 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18 3700.00 3653.19 3740.90 3604.96 16.21 14.95 104.35 -322.04 -747.62 687.06 657.99 23.64 3800.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 -322.04 -747.62 687.06 657.99 23.64 3800.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 -352.51 -773.60 70.652 676.37 23.14 3900.00 3743.85 3838.03 3893.15 17.00 15.70 104.35 -382.51 -800.34 778.90 694.84 22.68 42.60 4000.00 3834.85 3933.31 3779.95 17.79 16.41 104.32 -442.53 -826.87 2767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 678.81 731.85 22.28 4400.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 678.81 751.35 21.60 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4050.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 487.05 806.17 20.72 4600.00 4720.08 4621.62 4412.80 22.98 21.31 105.64 613.25 1007.08 885.62 842.26 20.43 4400.00 4720.08 4621.62 4412.80 22.98 21.31 105.64 613.25 1007.08 885.62 842.26 20.43 4600.00 4757.26 4621.62 4412.80 22.98 21.31 105.64 613.25 1007.08 885.62 842.26 20.43 4600.00 4757.26 4621.62 4412.80 22.98 21.31 105.64 613.25 1007.08 885.62 842.26 20.43 4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 675.33 1061.03 919.74 874.01 20.11 96.95 500.00 548.64 5590.38 505.26 24.36 23.54 104.78 -709.68 1159.49 97.68 903.09 856.63 30.21 10.90 91							10.16	103.55	-142.41	-593.21	570.75	550.20	27.78		
3400.00 3290.41 3352.41 3250.48 13.08 12.15 104.15 -231.64 -666.51 628.24 603.50 25.39 3500.00 3381.10 3449.56 3339.04 13.85 12.85 104.19 -261.99 -685.51 647.74 621.55 24.74 3500.00 3471.80 3546.63 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18 3700.00 3562.49 3644.87 3517.44 15.42 104.35 -322.04 -747.62 687.06 657.99 23.64 3800.00 3653.19 3740.90 3804.96 16.21 14.95 104.38 -351.81 -773.80 706.92 676.37 23.14 3900.00 3743.88 3538.03 3893.15 17.00 15.70 104.35 -382.51 -800.34 728.99 694.84 22.68 4000.00 3834.58 3933.31 3779.59 17.79 16.41 104.32 -412.53 -826.85 747.18 713.65 22.28 4100.00 3925.27 4031.66 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.99 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4800.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4508.38 22.48 22.07 105.67 -844.61.25 1007.08 885.62 842.26 20.43 4800.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1016.03 919.74 87.01 20.11 19.96 5500.00 5448.64 5590.38 91.50 4452.5 550.92 44.95 105.31 -675.33 -1016.03 919.74 87.01 20.11 19.96 5500.00 548.64 5590.38 5305.62 6.677 20.98 88.55 249.26 20.43 4800.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1016.03 919.74 87.01 20.11 19.96 5500.00 548.64 5590.38 5305.62 6.677 20.98 88.55 -877.72 5500.00 548.64 5590.38 5305.62 6.677 20.98 88.55 -877.72 5500.00 548.64 5590.38 5305.62 6.677 20.98 88.55 -897.17 -1254.58 1032.70 980.06 91.62 5500.00 548.64 5590.38 5305.62 6.677 20.98 88.55 -897.17 -1254.58 1032.70 980.06 91.62 5500.00 548.64 631.27 560.63 22.68 20.47 20.94 28.59 500.00 548.64 6313.72 5976.45 27.02 32.57 88.31 10.70 40.89 31.13 40.99 11.14 40.85 10.20 90.99 5900.00 548.86 631.22 566.82 20.63 27.75 28.32															
3500.00 3381.10 3449.56 3339.04 13.85 12.85 104.19 261.99 695.51 647.74 621.55 24.74 3600.00 3471.80 3546.63 3427.71 41.63 13.51 104.27 291.82 7274.40 687.40 639.80 24.18 3700.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 351.81 -777.80 706.92 676.37 23.14 3000.00 3743.88 383.80 3893.15 17.00 15.70 104.35 362.81 -777.80 706.92 676.37 23.14 3000.00 3834.58 3933.31 3779.59 17.79 16.74 104.35 362.81 -777.80 706.92 676.37 23.14 22.08 4000.00 3834.58 3933.31 3779.59 17.79 16.74 104.35 362.81 -800.34 726.90 694.84 22.68 4000.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 420.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4400.00 4288.05 4430.00 4286.05 22.28 22.89 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4400.00 4472.08 462.162 4412.80 22.98 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4400.00 4472.08 462.162 4412.80 22.98 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4400.00 4472.08 462.162 4412.80 22.98 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4400.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 1007.08 885.62 842.26 20.43 4800.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 1061.03 919.74 874.01 20.11 5000.00 4757.22 4825.25 4490.53 24.38 23.48 22.07 105.67 -644.76 103.45 890.30 918.67 19.80 5500.00 548.86 550.30 546.85 32.34 22.07 105.67 -644.76 103.45 890.30 918.67 19.80 5500.00 548.86 550.30 546.85 752.99 24.95 103.33 -764.39 1138.89 990.84 90.167 19.80 5500.00 548.86 550.38 500.56 552.49 26.47 26.50 102.46 -706.81 1158.99 976.69 27.71 19.62 5000.00 548.86 550.38 500.56 552.49 26.47 26.50 102.46 -706.81 1158.99 976.69 27.71 19.62 5000.00 548.86 577.35 25.87 26.85 100.20 885.87 27.75 19.85 19.95 19.55 100.00 548.86 577.50 27.50 580.30 26.85 27.75 28.70 580.30 19.55 100.20 90.00 548.86 577.50 27.50 580.30 26.85 27.75 28.70 580.30 26.85 27.75 28.70 580.30 26.95 27.75 28.70 28.85 29.71 12.28 10.00 10.62 10.00 19.55 20.00 548.8															
3600.00 3471.80 3546.63 3427.71 14.63 13.51 104.27 -291.82 -721.40 667.40 639.80 24.18 3700.01 3562.49 3644.87 3517.44 15.42 14.22 104.35 -322.04 -747.62 687.06 657.09 23.64 3800.00 3655.19 3740.00 3804.96 16.21 14.95 104.38 -351.81 -773.80 706.92 676.37 23.14 3900.00 3743.88 3838.03 3893.15 17.00 15.70 104.35 -382.51 -800.34 728.90 694.84 22.68 4000.00 3824.55 3833.31 3778.59 17.79 16.41 104.32 -412.53 -822.65 747.18 713.65 22.28 4100.00 3925.27 4031.65 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.09 20.98 19.25 104.92 5-530.34 -932.51 1827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -553.36 -957.22 847.05 806.17 20.72 4800.00 4472.08 462.16 2412.80 22.98 21.31 105.84 613.25 1007.08 885.62 842.26 20.43 4800.00 4770.00 4472.08 468.11 442.80 22.98 21.31 105.84 613.25 1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 106.67 -844.76 -1034.58 903.20 858.63 20.26 4900.00 4656.10 477.22 4925.25 4690.53 24.36 23.54 104.78 -700.01 477.02 4925.25 4690.53 24.36 23.54 104.78 -700.01 477.22 4925.25 4690.53 24.36 23.54 104.78 -700.01 4787.22 4925.25 4690.53 24.36 23.54 104.78 -700.01 1087.43 935.27 888.41 19.96 500.00 5080.50 521.00 4952.02 5308.91 5044.57 25.66 26.27 101.40 818.04 1183.84 990.84 940.00 146.64 579.02 530.04 952															
3700.00 3862.49 3644.87 3517.44 15.42 14.22 104.35 322.04 -747.62 687.06 657.99 23.64 3800.00 3853.19 3740.90 360.49 61.21 4.95 104.35 -382.20 4 -747.62 687.06 657.99 23.64 3800.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 -382.51 -800.34 728.90 694.84 22.68 4000.00 3825.27 4031.56 3869.30 18.59 17.79 16.41 104.32 -412.53 -826.85 747.18 713.65 22.28 4100.00 3925.27 4031.56 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 18.38 17.62 104.57 -471.76 -880.36 787.81 751.35 21.60 4300.00 4105.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -5303.44 =932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -5563.66 -957.22 847.05 806.17 20.72 4600.00 4472.08 4621.62 4412.80 22.98 12.31 105.84 -613.25 -1007.08 865.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -844.76 -1034.58 903.20 858.63 20.26 4900.00 4767.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1138.49 970.69 277.17 18.62 5400.00 5448.64 5590.36 910.457 25.66 26.27 1014.0 818.04 -1183.84 990.84 940.20 19.57 550.57 5242.86 26.17 28.23 97.55 887.17 -1254.58 103.27 980.84 990.99 14.65 63.23 19.54 5500.00 548.64 5590.35 503.27 25.66 26.27 101.40 818.04 -1183.84 990.84 940.20 19.57 5500.00 548.64 5590.35 503.77 25.87 26.85 26.27 20.44 86.25 20.4	330	30.00	3301.10	3449.00	3339.04	13.85	12.85	104.19	-261.99	-695.51	047.74	621.55	24.74		
3700.00 3862.49 3644.87 3517.44 15.42 14.22 104.35 322.04 -747.62 687.06 657.99 23.64 3800.00 3853.19 3740.90 360.49 61.21 4.95 104.35 -382.20 4 -747.62 687.06 657.99 23.64 3800.00 3743.88 3838.03 3693.15 17.00 15.70 104.35 -382.51 -800.34 728.90 694.84 22.68 4000.00 3825.27 4031.56 3869.30 18.59 17.79 16.41 104.32 -412.53 -826.85 747.18 713.65 22.28 4100.00 3925.27 4031.56 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 18.38 17.62 104.57 -471.76 -880.36 787.81 751.35 21.60 4300.00 4105.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -5303.44 =932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -5563.66 -957.22 847.05 806.17 20.72 4600.00 4472.08 4621.62 4412.80 22.98 12.31 105.84 -613.25 -1007.08 865.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -844.76 -1034.58 903.20 858.63 20.26 4900.00 4767.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1138.49 970.69 277.17 18.62 5400.00 5448.64 5590.36 910.457 25.66 26.27 1014.0 818.04 -1183.84 990.84 940.20 19.57 550.57 5242.86 26.17 28.23 97.55 887.17 -1254.58 103.27 980.84 990.99 14.65 63.23 19.54 5500.00 548.64 5590.35 503.27 25.66 26.27 101.40 818.04 -1183.84 990.84 940.20 19.57 5500.00 548.64 5590.35 503.77 25.87 26.85 26.27 20.44 86.25 20.4	360	00.00	3471.80	3546.63	3427.71	14.63	13 51	104 27	-291 82	-721 40	667.40	639 80	24.18		
3800.00 3653.19 3740.90 3604.96 16.21 14.95 104.38 351.81 -773.60 7766.92 676.37 22.14 3900.00 3743.88 383.03 389.03 15 17.00 15.70 104.35 382.51 82.00.34 726.90 694.84 22.68 4000.00 3834.58 3933.31 3779.59 17.79 16.41 104.32 412.53 -826.85 747.18 713.65 22.28 4100.00 4015.97 4132.30 3961.87 18.38 17.82 104.57 471.76 -880.36 787.81 751.35 21.60 4300.00 4015.97 4132.30 3961.87 18.38 17.82 104.57 471.76 -880.36 787.81 751.35 21.60 4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 613.25 -1007.08 885.62 842.26 20.43 4800.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 500.00 4854.24 502.96 64 4786.61 24.75 24.36 25.34 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 502.96 64 786.61 24.75 24.95 103.33 -764.39 -113.64 890.30 91.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 990.30 91.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 990.30 91.67 19.80 5200.00 5448.56 530.91 5044.57 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 898.71 -1254.58 1004.65 953.23 19.54 5600.00 548.64 5590.38 5305.26 26.17 28.23 97.55 898.71 -1254.89 1004.65 953.23 19.54 5600.00 548.64 6303.01 5717.70 26.69 31.27 28.23 97.55 898.11 -1344.89 1102.14 104.45 20.53 600.00 548.64 6303.01 5717.70 26.69 31.27 28.23 97.55 898.11 -1344.89 1102.14 104.45 20.53 6000.00 548.64 6313.72 566.03 22.74 33.95 27.88 11.13.00 -1471.61 11.12.27 20.09 6600.00 6448.64 6313.72 566.03 27.74 33.55 276.89 31.13.00 -1471.61 11.12.27 20.09 6600.00 6448.64 6313.72 5600.00 6448.64 6313.72 5600.00 6448.64 6313.72 5600.00 2600.00 6448.64 6313.72 5600.00 2600.00 6448.64 6313.72 5600.00 2600.00 6448.64 6313.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1															
3900.00 3743.88 3838.03 3693.15 17.00 16.71 104.35 382.51 -800.34 726.99 694.84 22.68 4000.00 3834.58 3933.31 3779.59 17.79 16.41 104.32 -412.53 826.85 747.18 713.65 22.28 4100.00 3825.27 4031.56 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -477.76 -880.36 787.81 751.35 21.60 4300.00 4105.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 767.81 20.99 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4600.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -980.98 865.50 842.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4800.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4952.05 4690.50 32.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5200.00 4562.05 64 476.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 5050.50 5213.00 4955.03 25.60 25.60 102.46 -790.88 -1159.49 96.39 21.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.88 -1159.49 976.99 927.17 19.62 5400.00 5448.64 5590.38 5305.26 26.01 7.82 93.55 93.71 -1254.58 109.45 99.57 5500.00 5548.64 560.57 5133.77 25.87 26.95 100.20 845.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 20.14 82.39 57.77 -1254.58 1032.70 980.06 19.62 5800.00 5548.64 571.36 5475.22 2.68 20.47 30.04 286.29 -967.22 -1322.00 108.51 1029.29 20.34 6100.00 6448.64 6515.22 66.86 22.7 101.40 -818.04 -118.38 91.02.11 104.45 500.00 5448.64 5590.38 5305.26 26.17 20.19 40.66 27 101.40 -818.04 -118.38 90.34 940.20 19.57 5500.00 5448.64 5600.00 5448.64 5600.00 5648.64 671.36 500.00 5648.64 671.36 500.00 5648.64 671.36 500.00 5648.64 671.37 20.69 31.27 26.29 97.72 -1322.20 1082.51 1029.29 20.34 6100.00 5448.64 6813.37 25.69 500.00 5648.64 681.37 25.59	380	00.00	3653.19	3740.90											
4100.00 3925.27 4031.56 3869.30 18.59 17.11 104.39 -442.24 -853.72 767.67 732.67 21.94 4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 -471.76 -880.36 787.81 751.35 21.60 4200.00 4106.66 4231.49 405.302 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4600.00 4379.38 452.26 4321.63 22.46 20.60 105.62 -584.86 -980.98 865.05 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 472.41 4506.38 23.46 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -113.78 949.63 901.67 19.80 5200.00 505.05 5 5213.00 4955.93 524.00 25.60 102.46 -790.86 -1183.84 990.84 940.20 19.57 5500.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 887.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 887.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 887.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 887.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 889.17 -1208.15 1004.65 953.23 19.54 6000.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 889.17 -1208.15 1004.65 953.23 19.55 500.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 889.17 -1208.15 1004.65 953.23 19.54 6000.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 889.17 -1208.15 1004.65 953.23 19.54 6000.00 5448.64 6580.72 5389.13 26.26 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 500.00 5448.64 6580.72 5389.13 26.26 28.87 28.99 1-1013.28 1-1099.47 1122.85 1068.68 20.73 600.00 6448.64 6318.66 634.01 571.7	390	00.00	3743.88	3838.03	3693.15								22.68		
4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 471.76 -880.36 787.81 751.35 21.80 4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 60.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4500.00 4379.38 4522.62 4221.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4503.88 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4561.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.99 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.68 -1159.49 976.96 927.17 19.62 5400.00 5448.56 5308.91 5404.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5448.66 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 103.45 99.97 20.09 5900.00 548.64 5771.36 5473.52 26.36 29.47 28.23 97.55 -897.17 -1254.58 103.45 99.97 20.09 5900.00 548.64 5771.36 5473.52 26.38 29.47 28.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5860.72 5889.13 26.26 28.85 289.41 -921.62 -127.55 1048.15 109.66 37 19.55 500.00 548.64 5771.36 5473.52 26.38 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 548.64 673.64 5860.03 26.94 26.94 27.04 28.29 -967.22 -1332.09 1082.51 1029.29 20.34 6000.00 648.64 6733.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 640.00 648.64 6413.84 6669.42 27.14 33.95 277.38 -1113.99 -1497.82 1237.79 1181.43 21.96 6600.00 648.64 6613.64 6613.64 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1237.79 1181.43 21.96 6600.00 648.64 6613.26 663.82 27.25 34.65 275.99 -113.99 -1497.82 1237.79 1181.43 21.96 6600.00 648.64 6613.26 663.82 27.25 34.65 275.99 -113.99 -1497.82 1237.79 1181.43 21.96 6600.00	400	00.00	3834.58	3933.31	3779.59	17.79	16.41	104.32	-412.53	-826.85	747.18	713.65	22.28		
4200.00 4015.97 4132.30 3961.87 19.38 17.82 104.57 471.76 -880.36 787.81 751.35 21.80 4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 60.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4500.00 4379.38 4522.62 4221.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4503.88 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4561.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.99 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.68 -1159.49 976.96 927.17 19.62 5400.00 5448.56 5308.91 5404.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5448.66 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 103.45 99.97 20.09 5900.00 548.64 5771.36 5473.52 26.36 29.47 28.23 97.55 -897.17 -1254.58 103.45 99.97 20.09 5900.00 548.64 5771.36 5473.52 26.38 29.47 28.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5860.72 5889.13 26.26 28.85 289.41 -921.62 -127.55 1048.15 109.66 37 19.55 500.00 548.64 5771.36 5473.52 26.38 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 548.64 673.64 5860.03 26.94 26.94 27.04 28.29 -967.22 -1332.09 1082.51 1029.29 20.34 6000.00 648.64 6733.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 640.00 648.64 6413.84 6669.42 27.14 33.95 277.38 -1113.99 -1497.82 1237.79 1181.43 21.96 6600.00 648.64 6613.64 6613.64 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1237.79 1181.43 21.96 6600.00 648.64 6613.26 663.82 27.25 34.65 275.99 -113.99 -1497.82 1237.79 1181.43 21.96 6600.00 648.64 6613.26 663.82 27.25 34.65 275.99 -113.99 -1497.82 1237.79 1181.43 21.96 6600.00			0005.07	1001 50											
4300.00 4106.66 4231.49 4053.02 20.18 18.54 104.73 -500.91 -906.46 807.83 769.88 21.29 4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 -530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -967.22 847.05 806.17 20.72 4600.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.68 4597.37 23.94 22.80 106.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 963.03 914.11 19.69 5300.00 5505.05 5213.00 4955.93 25.40 25.60 102.46 -790.88 -1159.49 976.99 277.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 548.86 5500.27 5333.77 25.87 26.95 100.20 -845.17 1208.15 1004.65 953.23 19.54 5600.00 548.64 5590.38 5305.26 26.17 28.23 97.55 897.17 -1254.58 1004.65 953.27 19.62 5800.00 5488.64 5590.38 5305.26 26.17 28.23 97.55 897.17 -1254.58 1004.65 953.97 20.09 5900.00 5648.64 5580.35 5305.26 26.17 28.23 97.55 897.17 -1254.55 1048.15 995.97 20.09 5900.00 5648.64 5580.05 5552.49 26.06 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 648.64 6213.63 5800.32 26.91 32.57 280.32 -1061.98 -1419.11 116.33 1112.27 21.20 6500.00 648.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 648.64 6618.46 6618.46 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 648.64 6618.46 6636.34 27.37 35.35 274.66 -1165.94 -1523.68 123.77 1811.43 21.96 6800.00 6648.64 6618.46 6636.34 27.37 35.35 274.66 -1165.94 -1523.68 123.77 1811.34 22.21 6600.00 6648.64 6723.66 6359.00 27.49 36.03 273.40 -1191.34 -1549.18 122.65 122.74															
4400.00 4197.36 4332.35 4145.90 20.98 19.25 104.92 530.34 -932.51 827.54 788.11 20.99 4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72 4600.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.88 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4980.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.86 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5445.7 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 548.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 1003.70 980.06 19.62 5800.00 5548.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 1003.70 980.06 19.62 5800.00 5548.64 5771.36 5473.52 26.86 29.47 287.76 -945.55 1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 967.22 -1322.09 1082.51 1029.29 20.34 6100.00 5848.64 6723.63 5800.63 26.80 31.91 281.81 -1037.05 -1398.74 114.65 1090.03 20.96 6400.00 648.64 6123.63 5800.63 26.80 31.91 281.81 -1037.05 -1398.74 114.65 1090.03 20.96 6400.00 648.64 6613.64 6613.64 6080.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 648.64 6618.46 6680.42 27.25 34.65 27.59 9-1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6618.46 6280.42 27.35 33.55 274.66 -1165.49 -1139.44 1191.84 128.45 9122.74 1															İ
4500.00 4288.05 4430.04 4236.16 21.79 19.94 105.15 -558.36 -957.22 847.05 806.17 20.72  4600.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4681.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.23 25.40 25.60 102.46 -790.88 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 1032.70 980.06 19.62 5800.00 5548.64 5680.72 5389.13 26.26 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 5900.00 5648.64 5771.36 5473.52 26.69 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 5900.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 548.64 64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 548.64 64 6217.06 887.03 26.80 31.97 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6448.64 6217.06 887.03 26.80 31.97 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6448.64 6217.06 887.03 26.80 31.97 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6448.64 6613.64 6618.46 660.32 27.25 34.65 27.52 34.65 27.90 27.35 27.83 -1067.74 -1445.23 1190.66 1135.16 21.45 6600.00 6448.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 6618.46 660.34 27.45 34.65 27.55 34.65 27.90 27.30															
4600.00 4379.38 4522.62 4321.63 22.46 20.60 105.62 -584.86 -980.98 866.50 824.34 20.55 4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 -613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.99 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.88 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.49 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 845.17 1-208.15 1004.65 953.23 19.54 5600.00 5348.71 5501.57 5222.86 26.04 27.62 98.85 -872.52 -1232.40 101.84 7 966.37 19.55 5700.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1264.58 1032.70 980.06 19.62 5800.00 5548.64 5680.72 5389.13 26.26 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 5900.00 5648.64 5771.36 5473.52 26.36 2947 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 6848.64 6217.06 5887.03 26.80 31.91 283.81 -1344.89 1102.14 1048.45 20.53 6200.00 5948.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6217.06 5887.03 26.91 32.57 280.32 -1010.59 -1339.74 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1010.59 -1339.74 1144.65 1090.03 20.96 6400.00 6448.64 6217.06 5887.03 26.91 32.57 280.32 -1010.99 -1497.82 1237.79 1181.43 21.96 6800.00 648.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6618.46 6217.06 5887.03 27.26 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 648.64 6413.84 66260.34 27.73 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22															Į
4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -113.64 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.88 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 5348.71 5501.57 5222.86 26.04 27.62 98.85 -872.52 -1232.40 1018.47 966.37 19.55 5700.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 1032.70 980.06 19.62 5800.00 5548.64 5680.72 5389.13 26.26 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 5900.00 5648.64 5771.36 5473.52 26.36 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5860.8 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 5448.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6200.00 548.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6123.63 5800.63 26.80 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6213.05 5887.03 26.91 32.57 280.32 -1061.98 +1419.11 1167.33 1112.27 21.20 6500.00 6448.64 6613.372 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6448.64 6618.46 6618.46 66260.34 27.37 35.35 274.86 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6618.46 6618.46 6260.34 27.37 35.35 274.86 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6618.46 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1264.59 1204.52 22.21 6900.00 6648.64 6618.46 6618.46 6260.34 27.37 36.03 273.40	100	0.00	4200.00	4450.04	7200.10	21.75	13.34	105.15	-556.50	-901.22	047.03	000.17	20.72		
4700.00 4472.08 4621.62 4412.80 22.98 21.31 105.84 613.25 -1007.08 885.62 842.26 20.43 4800.00 4566.03 4724.11 4506.38 23.48 22.07 105.67 -644.76 -1034.58 903.20 858.63 20.26 4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4757.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -113.64 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.68 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 5348.71 5501.57 5222.86 26.04 27.62 98.85 -872.52 -1232.40 1018.47 966.37 19.55 5700.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 1254.58 1032.70 980.06 19.62 5800.00 5548.64 5680.72 5389.13 26.26 28.85 289.41 -921.62 -1277.55 1048.15 995.97 20.09 5900.00 5648.64 5771.36 5473.52 26.36 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5860.8 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 6048.64 6123.63 5800.63 26.91 32.77 283.29 -1013.28 -1389.47 1122.85 1088.68 20.73 6300.00 6048.64 6213.63 5800.63 26.91 32.57 283.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6448.64 6613.64 6613.64 66818.46 6690.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6613.64 6660.04 27.65 6359.08 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6618.46 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1264.59 1204.52 22.21 6900.00 6648.64 6618.46 6618.46 6360.04 27.49 36.03 273.40 -1191.34 -1594.88 1284.59 1227.41 22.47	460	00.00	4379.38	4522.62	4321.63	22.46	20.60	105.62	-584.86	-980.98	866.50	824.34	20.55		Ì
4900.00 4661.11 4823.68 4597.37 23.94 22.80 105.31 -675.33 -1061.03 919.74 874.01 20.11 5000.00 4767.22 4925.25 4690.53 24.36 23.54 104.78 -706.01 -1087.43 935.27 888.41 19.96 5100.00 4854.24 5029.66 4786.61 24.75 24.29 104.06 -737.23 -1113.78 949.63 901.67 19.80 5200.00 4952.04 5122.43 4872.37 25.09 24.95 103.33 -764.39 -1136.46 963.03 914.11 19.69 5300.00 5050.50 5213.00 4955.93 25.40 25.60 102.46 -790.68 -1159.49 976.96 927.17 19.62 5400.00 5149.52 5308.91 5044.57 25.66 26.27 101.40 -818.04 -1183.84 990.84 940.20 19.57 5500.00 5248.96 5405.27 5133.77 25.87 26.95 100.20 -845.17 -1208.15 1004.65 953.23 19.54 5600.00 5348.71 5501.57 5222.86 26.04 27.62 98.85 -872.52 -1232.40 1018.47 966.37 19.55 5700.00 5448.64 5590.38 5305.26 26.17 28.23 97.55 -897.17 -1254.58 1032.70 980.06 19.62 5800.00 5548.64 5680.72 5389.13 26.26 28.85 289.41 -921.62 1277.55 1048.15 995.97 20.09 5900.00 5648.64 5771.36 5473.52 26.36 29.47 287.76 -945.55 -1300.40 1064.57 1011.82 20.18 6000.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 5848.64 6034.01 5771.70 26.69 31.27 283.29 -1013.28 -1369.47 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1013.28 -1369.47 1144.65 1090.03 20.96 6400.00 6448.64 6213.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6448.64 6213.66 5807.03 26.91 32.57 280.32 -1013.28 -1399.47 1144.65 1090.03 20.96 6400.00 6448.64 6613.36 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6600.00 6348.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6548.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1227.74 122.47 122.4	470	00.00	4472.08	4621.62	4412.80	22.98	21.31	105.84	-613.25 -	-1007.08	885.62	842.26	20.43		1
5000.00         4757.22         4925.25         4690.53         24.36         23.54         104.78         -706.01         -1087.43         935.27         888.41         19.96           5100.00         4854.24         5029.66         4786.61         24.75         24.29         104.06         -737.23         -1113.78         949.63         901.67         19.80           5200.00         4952.04         5122.43         4872.37         25.09         24.95         103.33         -764.39         -1136.46         963.03         914.11         19.69           5300.00         5050.50         5213.00         4955.93         25.40         25.60         102.46         -790.68         -1159.49         976.96         927.17         19.62           5400.00         5149.52         5308.91         5044.57         25.66         26.27         101.40         -818.04         -1183.84         990.84         940.20         19.57           5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -847.71         10.65         953.23         19.54           5600.00         5348.64         5590.38         5305.26         26.17         28.23         97.55         -897.17					4506.38	23.48	22.07	105.67	-644.76 -	-1034.58	903.20	858.63	20.26		
5100.00															
5200.00         4952.04         5122.43         4872.37         25.09         24.95         103.33         -764.39         -1136.46         963.03         914.11         19.69           5300.00         5050.50         5213.00         4955.93         25.40         25.60         102.46         -790.68         -1159.49         976.96         927.17         19.62           5400.00         5149.52         5308.91         5044.57         25.66         26.27         101.40         -818.04         -1183.84         990.84         940.20         19.57           5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -845.17         -1208.15         1004.65         953.23         19.54           5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41 <td>500</td> <td>00.00</td> <td>4757.22</td> <td>4925.25</td> <td>4690.53</td> <td>24.36</td> <td>23.54</td> <td>104.78</td> <td>-706.01 -</td> <td>-1087.43</td> <td>935.27</td> <td>888.41</td> <td>19.96</td> <td></td> <td>ĺ</td>	500	00.00	4757.22	4925.25	4690.53	24.36	23.54	104.78	-706.01 -	-1087.43	935.27	888.41	19.96		ĺ
5200.00         4952.04         5122.43         4872.37         25.09         24.95         103.33         -764.39         -1136.46         963.03         914.11         19.69           5300.00         5050.50         5213.00         4955.93         25.40         25.60         102.46         -790.68         -1159.49         976.96         927.17         19.62           5400.00         5149.52         5308.91         5044.57         25.66         26.27         101.40         -818.04         -1183.84         990.84         940.20         19.57           5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -845.17         -1208.15         1004.65         953.23         19.54           5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41 <td>510</td> <td>00 00</td> <td>1851 21</td> <td>5020 66</td> <td>1796 61</td> <td>24.75</td> <td>24.20</td> <td>104.06</td> <td>727 22</td> <td>1112 70</td> <td>040.62</td> <td>004.67</td> <td>10.80</td> <td></td> <td></td>	510	00 00	1851 21	5020 66	1796 61	24.75	24.20	104.06	727 22	1112 70	040.62	004.67	10.80		
5300.00         5050.50         5213.00         4955.93         25.40         25.60         102.46         -790.68         -1159.49         976.96         927.17         19.62           5400.00         5149.52         5308.91         5044.57         25.66         26.27         101.40         -818.04         -1183.84         990.84         940.20         19.57           5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -845.17         -1208.15         1004.65         953.23         19.54           5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         548.64         5580.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         548.64         5680.72         5389.13         26.26         28.85         289.41         -921.62         -1277.55         1048.15         995.97         20.09           5900.00         548.64         5845.08         5552.49         26.47         30.04         286.29															
5400.00         5149.52         5308.91         5044.57         25.66         26.27         101.40         -818.04         -1183.84         990.84         940.20         19.57           5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -845.17         -1208.15         1004.65         953.23         19.54           5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41         -921.62         -1277.55         1048.15         995.97         20.09           5900.00         5648.64         5771.36         5473.52         26.36         29.47         287.76         -945.55         -1300.40         1064.57         1011.82         20.18           6100.00         5848.64         5942.19         5632.53         26.58         30.63         284.83<															
5500.00         5248.96         5405.27         5133.77         25.87         26.95         100.20         -845.17         -1208.15         1004.65         953.23         19.54           5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41         -921.62         -1277.55         1048.15         995.97         20.09           5900.00         5648.64         5771.36         5473.52         26.36         29.47         287.76         -945.55         -1300.40         1064.57         1011.82         20.18           6000.00         5748.64         5856.08         5552.49         26.47         30.04         286.29         -967.22         -1322.09         1082.51         1029.29         20.34           6100.00         5848.64         5942.19         5632.53         26.58         30.63         284.8															
5600.00         5348.71         5501.57         5222.86         26.04         27.62         98.85         -872.52         -1232.40         1018.47         966.37         19.55           5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17         -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41         -921.62         -1277.55         1048.15         995.97         20.09           5900.00         5648.64         5771.36         5473.52         26.36         29.47         287.76         -945.55         -1300.40         1064.57         1011.82         20.18           6000.00         5748.64         5856.08         5552.49         26.47         30.04         286.29         -967.22         -1322.09         1082.51         1029.29         20.34           6100.00         5848.64         5942.19         5632.53         26.58         30.63         284.83         -989.31         -1344.89         1102.14         1048.45         20.53           6200.00         5948.64         6034.01         5717.70         26.69         31.27         283.	550	00.00	5248.96	5405.27	5133.77								19.54		
5700.00         5448.64         5590.38         5305.26         26.17         28.23         97.55         -897.17 -1254.58         1032.70         980.06         19.62           5800.00         5548.64         5680.72         5389.13         26.26         28.85         289.41         -921.62 -1277.55         1048.15         995.97         20.09           5900.00         5648.64         5771.36         5473.52         26.36         29.47         287.76         -945.55 -1300.40         1064.57         1011.82         20.18           6000.00         5748.64         5856.08         5552.49         26.47         30.04         286.29         -967.22 -1322.09         1082.51         1029.29         20.34           6100.00         5848.64         5942.19         5632.53         26.58         30.63         284.83         -989.31 -1344.89         1102.14         1048.45         20.53           6200.00         5948.64         6034.01         5717.70         26.69         31.27         283.29 -1013.28 -1369.47         1122.85 1068.68         20.73           6300.00         6048.64         6123.63         5800.63         26.80         31.91         281.81 -1037.05 -1393.74         1144.65 1099.03         20.96           6400.00															
5800.00       5548.64       5680.72       5389.13       26.26       28.85       289.41       -921.62       -1277.55       1048.15       995.97       20.09         5900.00       5648.64       5771.36       5473.52       26.36       29.47       287.76       -945.55       -1300.40       1064.57       1011.82       20.18         6000.00       5748.64       5856.08       5552.49       26.47       30.04       286.29       -967.22       -1322.09       1082.51       1029.29       20.34         6100.00       5848.64       5942.19       5632.53       26.58       30.63       284.83       -989.31       -1344.89       1102.14       1048.45       20.53         6200.00       5948.64       6034.01       5717.70       26.69       31.27       283.29       -1013.28       -1369.47       1122.85       1068.68       20.73         6300.00       6048.64       6123.63       5800.63       26.80       31.91       281.81       -1037.05       -1393.74       1144.65       1090.03       20.96         6400.00       6148.64       6217.06       5887.03       26.91       32.57       280.32       -1061.98       -1419.11       1167.33       1112.27       21.20															
5900.00       5648.64       5771.36       5473.52       26.36       29.47       287.76       -945.55       -1300.40       1064.57       1011.82       20.18         6000.00       5748.64       5856.08       5552.49       26.47       30.04       286.29       -967.22       -1322.09       1082.51       1029.29       20.34         6100.00       5848.64       5942.19       5632.53       26.58       30.63       284.83       -989.31       -1344.89       1102.14       1048.45       20.53         6200.00       5948.64       6034.01       5717.70       26.69       31.27       283.29       -1013.28       -1369.47       1122.85       1068.68       20.73         6300.00       6048.64       6123.63       5800.63       26.80       31.91       281.81       -1037.05       -1393.74       1144.65       1090.03       20.96         6400.00       6148.64       6217.06       5887.03       26.91       32.57       280.32       -1061.98       -1419.11       1167.33       1112.27       21.20         6500.00       6248.64       6313.72       5976.45       27.02       33.25       278.83       -1087.74       -1445.23       1190.66       1135.16       21.45 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>- 1</td></tr<>															- 1
6000.00 5748.64 5856.08 5552.49 26.47 30.04 286.29 -967.22 -1322.09 1082.51 1029.29 20.34 6100.00 5848.64 5942.19 5632.53 26.58 30.63 284.83 -989.31 -1344.89 1102.14 1048.45 20.53 6200.00 5948.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6123.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47															1
6100.00 5848.64 5942.19 5632.53 26.58 30.63 284.83 -989.31 -1344.89 1102.14 1048.45 20.53 6200.00 5948.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6123.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47															
6200.00 5948.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6123.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47			J. 1J.U7	3000.00	J00m.70	20.71	00.04	~00.20	301.22	. 022.00	1002.011	J_UU	20.04		
6200.00 5948.64 6034.01 5717.70 26.69 31.27 283.29 -1013.28 -1369.47 1122.85 1068.68 20.73 6300.00 6048.64 6123.63 5800.63 26.80 31.91 281.81 -1037.05 -1393.74 1144.65 1090.03 20.96 6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47	610	00.00	5848.64	5942.19	5632.53	26.58	30.63	284.83	-989.31 -	-1344.89	1102.14 1	048.45	20.53		
6400.00 6148.64 6217.06 5887.03 26.91 32.57 280.32 -1061.98 -1419.11 1167.33 1112.27 21.20 6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45 6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47				6034.01	5717.70								20.73		
6500.00 6248.64 6313.72 5976.45 27.02 33.25 278.83 -1087.74 -1445.23 1190.66 1135.16 21.45  6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70  6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96  6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21  6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47															
6600.00 6348.64 6413.84 6069.42 27.14 33.95 277.38 -1113.90 -1471.61 1214.12 1158.18 21.70 6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47															- 1
6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47	650	00.00	0248.64	6313.72	5976.45	27.02	33.25	278.83 -	1087.74 -	-1445.23	1190.66 1	135.16	21.45		
6700.00 6448.64 6515.22 6163.82 27.25 34.65 275.99 -1139.99 -1497.82 1237.79 1181.43 21.96 6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47	660	00.00	6348 64	6413.84	6069 42	27 14	33 05	277 39 -	1112 00 -	1471 61	1214 12 1	158 18	21 70		
6800.00 6548.64 6618.46 6260.34 27.37 35.35 274.66 -1165.94 -1523.68 1261.30 1204.52 22.21 6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47															
6900.00 6648.64 6723.56 6359.08 27.49 36.03 273.40 -1191.34 -1549.18 1284.59 1227.41 22.47						27.37									
	690	00.00				27.49									
	700	00.00	6748.64	6833.37							1307.37 1	249.78	22.70		
7400.00 0040.04 0000.40 0000.75 07.70 07.05 07.45 455 55 455 55 450 55 450 45 457 54	74.	20.00	0040.04	0000 40	0506 ==	07.70		074	1000	4500.00	4000 40 4	074 54	00.04		
7100.00 6848.64 6939.46 6563.75 27.73 37.35 271.15 -1239.39 -1598.27 1329.48 1271.54 22.94															
7200.00 6948.64 7037.47 6657.18 27.86 37.92 270.25 -1259.76 -1619.77 1351.65 1293.40 23.20 7300.00 7048.64 7147.95 6762.85 27.98 38.54 269.29 -1282.09 -1643.01 1373.20 1314.59 23.43															
7300.00 7048.64 7147.95 6762.85 27.98 38.54 269.29 -1282.09 -1643.01 1373.20 1314.59 23.43	130	JU.UU	7 040.04	7 147.80	0102.00	21.90	30.34	<u> </u>	1202.09	1043.01	1313.20 1	U 14.U8	ZQ.40		



Company: Field: Reference Site:

Reference Well:

Reference Wellpath: 1

BILL BARRETT CORP

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

PRICKLY PEAR UF #6-22D-12-15

Date: 12/20/2007

Time: 10:03:42

Page:

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15

SITE 7199.7

Db: Sybase

Well: Wellp:

PRICKLY PEAR 3-22 PAD PRICKLY PEAR UF #7-22D-12-15 4008921P V1

Wellpath:	4008921	P V1							Inter-Sit	e Error:	0.00	ft	
Refe	rence	O	ffset	Semi-M	lajor Axi	ş	Offset	Location	Ctr-Ctr	Edge	Separation		
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	Warning	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
100.00	100.00	106.41	106.41	0.11	0.15	302.45	162.69	-255.86	303.20	302.94	1188.13		
200.00	200.00	205.56	205.56	0.33		302.28		-256.70	303.63		491.12		
300.00	300.00	304.71	304.69	0.56		302.00		-258.08	304.35		310.20		
400.00	400.00	403.82	403.78	0.78	0.58	301.62	160.10	-260.00	305.36		227.24		
500.00	500.00	502.91	502.82	1.01	0.73	301.14	158.56	-262.45	306.66	304.96	179.76		
600.00	600.00	601.95	601.80	1.23		300.56		-265.43	308.28		149.11		
700.00	700.00	700.94	700.70	1.46	1.01	299.87		-268.95	310.24		127.75		
800.00	800.00	799.88	799.52	1.68		299.10		-273.00	312.54		112.07		
900.00	900.00	898.75	898.25	1.90		298.24		-277.58	315.22		100.13		
1000.00	1000.00	997.55	996.86	2.13	1.44	297.30	145.90	-282.69	318.29	314.79	90.78		
1100.00	1100.00	4006 97	1005.00	0.05	4 50	000.00	440.07	000.00	004.70	047.00	00.00		
1200.00	1200.00	1096.27	1095.36	2.35		296.28		-288.33	321.79		83.29		
1300.00	1300.00	1194.90 1293.43	1193.72	2.58		295.19		-294.49	325.73		77.20		
1400.00	1400.00	1293.43	1291.94 1390.00	2.80 3.03		294.04		-301.18	330.14		72.18		
1500.00	1500.00	1490.18	1487.89	3.03		292.83 291.58		-308.38 -316.10	335.04 340.47		68.01 64.51		
1000.00	1000.00	1700.10	1901.08	J.ZÚ	2.10	251.00	123.00	-310.10	340.47	JJJ.20	04.01		
1600.00	1600.00	1592.43	1589.59	3.48	2.43	96.68	118 61	-324.56	346.05	340 28	60.02		
1700.00	1699.91	1697.78	1693.76	3.71	2.76	94.79		-333.88	350.95		55.67		
1800.00	1799.56	1805.25	1799.20	3.94	3.14	92.79		-343.05	354.54		51.29		
1900.00	1898.75	1916.61	1907.59	4.19	3.57	90.90		-350.97	356.14		46.86		
2000.00	1997.30	2035.89	2023.01	4.47	4.01	89.38		-354.44	353.11		42.35		
2100.00	2095.02	2150.25	2133.31	4.78	4.43	88.76		-352.60	345.50		37.91		
2200.00	2191.71	2267.65	2246.30	5.14	4.85	89.24		-345.24	333.31		33.52		
2300.00	2287.21	2383.61	2357.35	5.56	5.25	91.14		-331.13	315.39		29.19		
2400.00	2381.32	2492.25	2460.93	6.04	5.64	94.73		-312.43	293.36		25.15		
2500.00	2473.87	2595.01	2558.61	6.60	6.00	100.42	-107.73	-290.42	269.53	257.06	21.62		
2600.00	0564.05	0000.00	0047.04	7.00	0.40	407.04	400.00	000 70	0.47.74	004.50	40.00		
2600.00 2700.00	2564.85	2688.88	2647.61	7.23		107.31			247.71		18.80		
2800.00	2655.54 2746.24	2786.43	2739.65	7.90		115.22			228.93		16.72		
2900.00	2836.93	2886.40 2987.01	2833.04 2925.39	8.60 9.31		124.50			212.57 198.39		15.30 14.41		
3000.00	2927.63	3079.46	3009.24	10.05		135.28 146.45			189.55		13.93		
0000.00	2021.00	3079.40	3009.24	10.05	0.00	140.45	-229.23	-102.22	109.55	113.53	13.93		
3100.00	3018.32	3169.16	3090.73	10.79	9 25	157.62	-254 91	-134 93	189.73	175 94	13.76		
3200.00	3109.02	3260.23	3173.92	11.55		168.26			199.15		13.71		
3300.00	3199.71	3351.50	3257.22	12.31		177.83		-81.26	215.61		13.65		
3400.00	3290.41	3441.53	3339.18	13.08		186.11		-53.77	238.49		13.70		
3500.00	3381.10	3531.66	3421.19	13.85		193.03		-26.09	266.02		13.87		
3600.00	3471.80	3620.08	3501.68	14.63		198.64		1.52	297.57		14.18		
3700.00	3562.49	3710.15	3583.56	15.42		203.37		30.08	331.88		14.55		
3800.00	3653.19	3800.66	3665.73	16.21		207.30		58.95	367.95		14.94		
3900.00	3743.88	3890.48	3747.21	17.00		210.57		87.78	405.43		15.37		
4000.00	3834.58	3981.25	3829.68	17.79	15.30	213.28	-478.64	116.69	443.89	415.84	15.83		
4100.00	2025.07	4074.04	2040 40	40.50	45.00	045 40	E00 E0	444.07	400.00	AEO 44	46.04		
4100.00 4200.00	3925.27	4071.64	3912.13	18.59		215.46		144.97	483.02		16.31		
4300.00	4015.97 4106.66	4161.73 4255.31	3994.48 4080.30	19.38 20.18		217.27 218.80		172.93 201.39	522.74 562.64		16.79 17.22		
4400.00	4197.36	4349.14	4166.59	20.18		220.08		229.24	602.32		17.22		
4500.00	4288.05	4437.19	4247.35	21.79		221.19		255.73	642.24		18.04		
	.200.00		12-11.00	20	. 0.01	1.10	301.01	200.10	V-16-6-7				
4600.00	4379.38	4531.53	4333.74	22.46	19.41	221.84	-622.29	284.29	681.30	644.32	18.42		
4700.00	4472.08	4627.94	4422.34	22.98		222.52		312.66	717.70		18.77		
4800.00	4566.03	4719.81	4506.91	23.48		223.22		339.38	751.74		19.06		
4900.00	4661.11	4806.79	4586.65	23.94		224.00		365.39	784.16		19.31		
5000.00	4757.22	4906.53	4677.98	24.36	22.30	225.07	-721.17	395.38	814.67	772.78	19.45		
F400 00	40=										40		
5100.00	4854.24	5011.95	4775.29	24.75	23.08	226.22	-748.59	425.20	842.16	799.03	19.53		

## Weatherford International, Ltd. **Anticollision Report**

Company: Field:

BILL BARRETT CORP

CARBON COUNTY, UTAH

12/20/2007

Time: 10:03:42

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #6-22D-12-15

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: PRICKLY PEAR UF #6-22D-12-15

SITE 7199.7

Db: Sybase

Site: PRICKLY PEAR 3-22 PAD
Well: PRICKLY PEAR UF #7-22D-12-15
Wellpath: 4008921P V1

Inter-Site Error:

0.00 ft

Ref	erence	O	ffset	Semi-N	Iajor Axis		Offset	Location	Ctr-Ctr	Edge	Separation	
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distanc	Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		_
5200.00	4952.04	5108.00	4864.24	25.09	23.78	227.29	-773.59	451.48	867.06	822.83	19.60	-
5300.00	5050.50	5195.15	4944.84	25.40	24.42	228.34	-796.20	475.74	890.64	845.45	19.71	
5400.00	5149.52	5290.85	5033.58	25.66	25.10	229.56	-820.20	502.28	912.92	866.74	19.77	
5500.00	5248.96	5390.97	5126.83	25.87	25.81	230.91	-844.64	529.34	933.33	886.18	19.80	
5600.00	5348.71	5497.93	5226.67	26.04	26.56	232.48	-870.98	557.25	951.45	903.33	19.77	
5700.00	5448.64	5566.00	5290.21	26.17	27.04	233.47	-888.40	574.33	967.63	918.97	19.88	
5800.00	5548.64	5566.00	5290.21	26.26	27.04	66.71 -	-888.40	574.33	989.94	939.42	19.60	
5900.00	5648.64	5566.00	5290.21	26.36	27.04	66.71	-888.40	574.33	1021.33	970.95	20.27	
6000.00	5748.64	5566.00	5290.21	26.47	27.04	66.71	-888.40	574.33	1061.26 1	011.01	21.12	
6100.00	5848.64	5566.00	5290.21	26.58	27.04	66.71	-888.40	574.33	1108.79 1	058.69	22.13	
6200.00	5948.64	5566.00	5290.21	26.69	27.04		-888.40	574.33	1163.00 1	113.04	23.28	
6300.00	6048.64	5566.00	5290.21	26.80	27.04		-888.40	574.33	1222.99 1	173.19	24.56	
6400.00	6148.64	5566.00	5290.21	26.91	27.04		-888.40	574.33	1287.96 1	238.31	25.94	
6500.00	6248.64	5566.00	5290.21	27.02	27.04	66.71	-888.40	574.33	1357.20 1	307.70	27.42	
6600.00	6348.64	5566.00	5290.21	27.14	27.04	66.71	-888.40	574.33	1430.08 1	380.74	28.98	
6700.00	6448.64	5566.00	5290.21	27.25	27.04		-888.40	574.33	1506.08 1	456.88	30.61	
6800.00	6548.64	5566.00	5290.21	27.37	27.04		-888.40	574.33	1584.75 1	535.69	32.30	
6900.00	6648.64	5566.00	5290.21	27.49	27.04		-888.40	574.33	1665.71 1	616.78	34.05	
7000.00	6748.64	5566.00	5290.21	27.61	27.04		-888.40	574.33	1748.63 1	699.84	35.84	
7100.00	6848.64	5566.00	5290.21	27.73	27.04	66.71 -	-888.40	574.33	1833.27 1	784.60	37.67	
7200.00	6948.64	5566.00	5290.21	27.86	27.04		-888.40	574.33	1919.38 1	870.83	39.53	
7300.00	7048.64	5566.00	5290.21	27.98	27.04		-888.40	574.33	2006.78 1	958.34	41.43	

Site:

PRICKLY PEAR 4-22D PAD

Well: PRICKLY PEAR UF #13-15D-12-15

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Refe	rence	Of	fset	Semi-M	ajor Axis	······································	Offset	Location	Ctr-Ctr	Edge	Separation		
MD	TVD	MD	TVD	Ref	Offset	TFO-HS		East		Distance	Factor	Warning	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft			
100.00	100.00	100.00	100.00	0.11	0.11	259.17	-3.06	-16.01	16.30	16.08	76.32		
200.00	200.00	200.00	200.00	0.33	0.33	259.17	-3.06	-16.01	16.30	15.63	24.58		
300.00	300.00	300.07	300.05	0.56	0.56	265.31	-1.31	-16.01	16.06	14.95	14.42		
400.00	400.00	399.89	399.73	0.78	0.79	283.72	3.91	-16.01	16.48	14.91	10.51		1
500.00	500.00	499.23	498.68	1.01	1.03	308.10	12.55	-16.01	20.38	18.35	10.03		
600.00	600.00	597.85	596.57	1.23	1.31	326.86	24.52	-16.01	29.48	26.99	11.83		
700.00	700.00	696.86	694.62	1.46	1.61	337.32	38.30	-16.01	41.86	38.90	14.18		
800.00	800.00	795.89	792.68	1.68	1.93	342.91	52.08	-16.01	54.97	51.56	16.11		
900.00	900.00	894.91	890.74	1.90	2.25	346.34	65.86	-16.01	68.41	64.54	17.66		
1000.00	1000.00	993.94	988.81	2.13	2.57	348.64	79.64	-16.01	82.00	77.67	18.91		l
1100.00	1100.00	1092.80	1086.71	2.35	2.87	349.37	93.22	-17.50	95.77	90.99	20.02		
1200.00	1200.00	1192.42	1185.37	2.58	3.16	348.12	106.10	-22.32	109.40	104.18	20.95		
1300.00	1300.00	1292.95	1284.94	2.80	3.43	345.55	117.48	-30.27	122.25	116.59	21.59		ŀ
1400.00	1400.00	1393.47	1384.48	3.03	3.70	342.18	126.71	-40.74	134.00	127.89	21.96		
1500.00	1500.00	1492.49	1482.54	3.25	3.99	339.13	135.24	-51.56	145.78	139.23	22.24		
1600.00	1600.00	1590.77	1579.85	3.48	4.28	143.14	143.74	-62.34	158.24	151.23	22.58		ļ
1700.00	1699.91	1685.52	1673.43	3.71	4.59	141.28	152.93	-74.00	175.23	167.78	23.50		
1800.00	1799.56	1778.80	1765.17	3.94	4.92	140.11	163.37	-87.25	197.80	189.90	25.03		
1900.00	1898.75	1870.24	1854.68	4.19	5.28	139.46	174.95	<b>-</b> 101.94	225.73	217.38	27.02		
2000.00	1997.30	1959.48	1941.57	4.47	5.65	139.16	187.53	-117.90	258.86	250.04	29.34		ŀ
2100.00	2095.02	2046.19	2025.53	4.78	6.05	139.06	200.96	-134.92	297.03	287.71	31.90		
2200.00	2191.71	2130.10	2106.28	5.14	6.47	139.06	215.07	-152.82	340.07	330.24	34.58		
2300.00	2287.21	2210.95	2183.60	5.56	6.90	139.07	229.70	-171.38	387.83	377.44	37.32		



Company: Field:

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

Time: 10:03:42

Page:

Reference Site: Reference Well:

Reference Wellpath: 1

PRICKLY PEAR UF #6-22D-12-15

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Date: 12/20/2007

Well: PRICKLY PEAR UF #6-22D-12-15 SITE 7199.7

Db: Sybase

Well:

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #13-15D-12-15

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error:

0.00 ft

wепрата:	1 VU Plan	: Plan #1 V	/1						Inter-Sit	e Error:	0.00	ft
Refe	erence	O <sub>1</sub>	ffset	Semi-M	lajor Axis		Offset	Location	Ctr-Ctr	Edge	Separation	
MD	TVD	MD .	TVD	Ref			S North	East			Factor	Warning
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
	· · · · · · · · · · · · · · · · · · ·											
2400.00	2381.32	2288.54	2257.31	6.04		139.04		-190.40	440.12		40.02	
2500.00	2473.87	2362.68	2327.27	6.60	7.81	138.93	259.88	-209.66	496.74	485.08	42.62	
2600.00	2564.85	2433.44	2393.59	7.23	8.27	139.24	275.16	-229.04	557.23		45.05	
2700.00	2655.54	2502.29	2457.67	7.90	8.73	140.02		-248.82	619.48	606.37	47.22	
2800.00	2746.24	2569.57	2519.83	8.60	9.22	140.60	306.68	-269.02	682.98	669.09	49.17	
2900.00	2836.93	2635.28	2580.10	9.31	9.72	141.01	322.88	-289.57	747.66	732.98	50.92	
3000.00	2927.63	2699.45	2638.51	10.05	10.22	141.30	339.32	-310.43	813.44	797.95	52.52	
3100.00	3018.32	2762.08	2695.10	10.79	10.75	141.50	355.96	-331.53	880.28	863.97	53.96	
3200.00	3109.02	2823.22	2749.88	11.55	11.27	141.63		-352.82	948.13	930.99	55.29	
3300.00	3199.71	2889.01	2808.43	12.31		141.71		-376.40	1016.86	998.83	56.40	
3400.00	3290.41	2961.52	2872.88	13.08		141.79		-402.48	1085.72 1		57.24	
3500.00	3381.10	3034.02	2937.32	13.85		141.85		-428.57	1154.59 1		57.97	
0000.00	0001.10	0001.02	2007.02	10.00	10.10	141.00	402.41	420.01	1104.00 1	10-1.07	01.01	
3600.00	3471.80	3106.53	3001.77	14.63	13.84	141.91	453 N/	-454.66	1223.45 1	202 57	58.61	
3700.00	3562.49	3179.03	3066.22	15.42		141.96		-480.75	1292.32 1		59.17	
3800.00	3653.19	3251.53						-400.75 -506.83	1361.18 1		59.67	
3900.00	3743.88		3130.66	16.21		142.00						
		3324.04	3195.11	17.00		142.05		-532.92	1430.05 1		60.11	
4000.00	3834.58	3396.54	3259.56	17.79	16.54	142.08	535.30	-559.01	1498.91 1	4/4.14	60.50	
4400.00	2005.07	0.400.00	0004.00	40.50	47.00	440.40	EEE ^-	E0E 00	4507.70.4	E40.00	60.00	
4100.00	3925.27	3469.05	3324.00	18.59		142.12		-585.09	1567.78 1		60.86	
4200.00	4015.97	3541.55	3388.45	19.38		142.15		-611.18	1636.65 1		61.18	
4300.00	4106.66	3614.06	3452.90	20.18	18.59	142.18		-637.27	1705.51 1		61.47	
4400.00	4197.36	3686.56	3517.34	20.98	19.28	142.21		-663.36	1774.38 1	745.64	61.73	
4500.00	4288.05	3759.07	3581.79	21.79	19.97	142.23	638.14	-689.44	1843.25 1	813.50	61.96	
4600.00	4379.38	3832.41	3646.98	22.46	20.67	143.27	658.95	-715.83	1911.22 1	880.70	62.63	
4700.00	4472.08	3907.58	3713.80	22.98		144.21	680.27	-742.88	1977.11 1	945.91	63.37	
4800.00	4566.03	3984.50	3782.17	23.48		145.00		-770.55	2040.85 2		64.02	
4900.00	4661.11	4063.06	3852.00	23.94		145.67		-798.82	2102.39 2		64.60	
5000.00	4757.22	4143.17	3923.20	24.36		146.21		-827.64	2161.65 2		65.11	
0000.00	1101.22	41-70.17	0020.20	21.00	20.00	140.21	147.10	027.04	2101.002	.,_0.,		
5100.00	4854.24	4224.73	3995.70	24.75	24 41	146.66	770 24	-856.99	2218.58 2	184.75	65.57	
5200.00	4952.04	4307.65	4069.41	25.09		147.01		-886.83	2273.16 2		65.99	
5300.00	5050.50	4391.83	4144.22	25.40		147.27		-917.11	2325.33 2		66.36	
5400.00	5149.52	4477.15	4220.06	25.66		147.46		-947.81	2375.08 2		66.71	
5500.00	5248.96								2422.36 2		67.03	
3300.00	5240.90	4563.52	4296.83	25.87	21.01	147.57	000.34	-978.89	2422.30 2	.500.22	07.00	
5600.00	E240 74	1650.00	1974 44	26.04	20 54	147.00	004 40	1010 20	2467.17 2	M30 52	67.33	
	5348.71	4650.83	4374.44	26.04	20.07	147.62		-1010.30				
5700.00	5448.64	4738.97	4452.79	26.17		147.60		-1042.02	2509.49 2		67.61	
5800.00	5548.64	4827.77	4531.71	26.26		340.71		-1073.96	2549.63 2		72.57	
5900.00	5648.64	4916.65	4610.72	26.36		340.18		-1105.95	2589.61 2		72.42	
6000.00	5748.64	5005.54	4689.73	26.47	31.92	339.67	991.72	-1137.93	2629.78 2	2593.41	72.30	
	<b>=0.1</b>	===:							0000 4 4 5		70.40	
6100.00	5848.64	5094.42	4768.74	26.58			1016.94		2670.14 2		72.19	
6200.00	5948.64	5183.31	4847.74	26.69	33.64	338.69	1042.15	-1201.89	2710.67 2		72.09	
6300.00	6048.64	5272.20	4926.75	26.80				-1233.87	2751.36 2		72.02	
6400.00	6148.64	5361.08	5005.76	26.91	35.36	337.76	1092.58	-1265.85	2792.22 2	2753.41	71.95	
6500.00	6248.64	5527.75	5154.70	27.02			1138.87		2832.68 2		71.11	
6600.00	6348.64	5805.92	5409.89	27.14	38.76	335.83	1207.33	-1411.40	2868.41 2	2827.18	69.57	
6700.00	6448.64	6100.85	5688.46	27.25			1267.16		2897.94 2	2855.49	68.27	
6800.00	6548.64	6410.29	5987.83	27.37			1315.43		2920.69 2	2877.25	67.24	
6900.00	6648.64	6731.01	6303.71	27.49			1349.46		2936.20 2		66.49	
7000.00	6748.64	7058.92	6630.27	27.61			1367.17		2944.10 2		66.03	
. 550.00	U1-10.04	, 000.02	0000.27	21.01	70,71	500.00	.007.17	.0.7.17	20.7.102			
7100.00	6848.64	7277.35	6848.64	27.73	43.67	333 47	1369.51	-1617 10	2945.13 2	2898.61	63.30	
7200.00	6948.64	7377.35	6948.64	27.86			1369.51		2945.13 2		62.93	
7300.00	7048.64	7477.35	7048.64	27.98			1369.51		2945.13 2		62.56	
, 555.55	10-0.04	1711.00	70-0.04	21.80	70.01	300.47	.003.01		2010.102			



**Anticollision Report** 

Company: Field: Reference Site:

Reference Well:

Reference Wellpath: 1

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

PRICKLY PEAR UF #6-22D-12-15

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Date: 12/20/2007

Time: 10:03:42

Page:

Well: PRICKLY PEAR UF #6-22D-12-15 SITE 7199.7

Db: Sybase

Well:

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #14-15D-12-15

***	ellpath:	1 V0 Plan	: Plan #1 V	/1						Inter-Site	e Error:	0.00	ft
	Refe		Of	ffset	Semi-M	lajor Axis		Offset	Location	Ctr-Ctr	Edge !	Separation	
	MD	TVD	MD	TVD	Ref	2	TFO-HS	_	East	_	Distance	Factor	Warning
	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
	00.00	100.00	100.00	100.00	0.11	0.11	74.87	4.06	15.01	15.55	15.33	72.82	
	200.00	200.00	200.00	200.00	0.33	0.33	74.87	4.06	15.01	15.55	14.89	23.45	
	300.00	300.00	300.00	300.00	0.56	0.56	74.87	4.06	15.01	15.55	14.44	13.97	
	00.00	400.00	400.00	400.00	0.78	0.78	74.87	4.06	15.01	15.55	13.99	9.95	
b	500.00	500.00	500.00	500.00	1.01	1.01	74.87	4.06	15.01	15.55	13.54	7.73	
6	00.00	600.00	600.00	600.00	1.23	1.23	74.87	4.06	15.01	15.55	13.09	6.32	
	00.00	700.00	700.00	700.00	1.46	1.46	74.87	4.06	15.01	15.55	12.64	5.34	
	300.00	800.00	800.00	800.00	1.68	1.68	74.87	4.06	15.01	15.55	12.19	4.63	
	00.00	900.00	900.00	900.00	1.90	1.90	74.87	4.06	15.01	15.55	11.74	4.08	
10	00.00	1000.00	1000.00	1000.00	2.13	2.13	74.87	4.06	15.01	15.55	11.29	3.65	
		4400.00	4400.00	4400.00						45.50	10.01	0.00	
	00.00	1100.00	1100.00	1100.00	2.35	2.35	74.87	4.06	15.01	15.55	10.84	3.30	
	200.00	1200.00	1200.00	1200.00	2.58	2.58	74.87	4.06	15.01	15.55	10.39	3.01	
	00.00 100.00	1300.00	1300.00	1300.00	2.80	2.80	74.87	4.06	15.01	15.55	9.94	2.77	
	500.00	1400.00 1500.00	1400.00 1500.00	1400.00 1500.00	3.03 3.25	3.03 3.25	74.87 74.87	4.06 4.06	15.01 15.01	15.55 15.55	9.49 9.04	2.57 2.39	
13	,,,,,,	1000.00	1500.00	1500.00	3.23	3.23	14.01	4.00	10.01	13.33	J.U4	2.08	
16	00.00	1600.00	1599.98	1599.98	3.48	3.48	239.09	4.40	14.93	15.74	8.79	2.26	
	00.00	1699.91	1699.47	1699.38	3.71		217.34	8.19	14.07	19.48	12.08	2.63	
	00.00	1799.56	1797.47	1797.05	3.94	3.92	195.06	16.04	12.28	32.18	24.35	4.11	
	00.00	1898.75	1893.00	1891.83	4.19	4.15	183.24	27.60	9.64	54.78	46.55	6.65	
20	00.00	1997.30	1985.15	1982.72	4.47	4.38	177.35	42.40	6.27	86.13	77.50	9.98	
21	00.00	2095.02	2073.19	2068.91	4.78	4.62	174.10	59.84	2.29	125.37	116 25	13.90	
	200.00	2191.71	2156.50	2149.79	5.14		174.10	79.32	-2.14	171.89		18.30	
	00.00	2287.21	2234.63	2224.93	5.56			100.17	-6.90	225.14		23.06	
	00.00	2381.32	2307.28	2294.11	6.04		169.71	121.79	-11.82	284.58		28.08	
	00.00	2473.87	2374.29	2357.26	6.60			143.62	-16.80	349.67		33.29	
	00.00	2564.85	2435.84	2414.67	7.23			165.25	-21.73	419.61		38.46	
	00.00	2655.54	2493.93	2468.30	7.90			187.04	-26.69	491.81		43.28	
	300.00	2746.24	2549.13	2518.71	8.60			208.96	-31.69	565.63		47.83	
	00.00 00.00	2836.93 2927.63	2610.49 2676.45	2574.26 2633.93	9.31			234.37 261.77	-37.48 -43.73	640.67 715.81		51.89 55.45	
30	00.00	2821.03	2070.45	2033.93	10.05	7.55	107.30	201.77	-43.13	7 13.01	102.90	55.45	
31	00.00	3018.32	2742.41	2693.61	10.79	8.00	167.20	289.16	-49.97	790.95	777.47	58.65	
	200.00	3109.02	2808.37	2753.28	11.55			316.56	-56.21	866.10		61.55	
33	800.00	3199.71	2874.33	2812.96	12.31			343.95	-62.46	941.25		64.17	
	00.00	3290.41	2940.29	2872.64	13.08		166.82	371.35	-68.70	1016.41 1		66.56	
35	00.00	3381.10	3006.25	2932.31	13.85	9.89	166.73	398.74	<b>-</b> 74.95	1091.56 1	075.68	68.73	
20	00.00	2474.00	2070.04	2004.00	1400	40.00	400.05	100 11	04.40	4466 74 4	450.04	70.74	
	00.00	3471.80	3072.21	2991.99	14.63			426.14	-81.19	1166.711		70.71 72.53	
	700.00 800.00	3562.49 3653.19	3138.17 3204.13	3051.66 3111.34	15.42 16.21			453.53 480.93	-87.43 -93.68	1241.87 1 1317.03 1		72.53 74.19	
	900.00	3743.88	3204.13	3171.34	17.00			508.32	-93.66 -99.92	1392.18 1		74.19 75.72	
	00.00	3834.58	3336.05	3230.69	17.79				-106.17	1467.34 1		77.14	
			2223.00										
	00.00	3925.27	3402.01	3290.37	18.59				-112.41	1542.50 1		78.45	
	200.00	4015.97	3467.97	3350.04	19.38				-118.65	1617.66 1		79.65	
	300.00	4106.66	3533.93	3409.72	20.18				-124.90	1692.81 1		80.78	
	00.00	4197.36	3599.89	3469.39	20.98				-131.14	1767.97 1		81.83	
40	00.00	4288.05	3665.85	3529.07	21.79	15.01	166.22	0/2./0	-137.39	1843.13 1	020.01	82.80	
46	00.00	4379.38	3732.92	3589.76	22.46	15.54	166.66	700.55	-143.74	1917.29 1	894.41	83.83	
	00.00	4472.08	3802.46	3652.67	22.98				-150.32	1989.12 1		84.85	
	300.00	4566.03	3874.37	3717.73	23.48				-157.12	2058.55 2		85.76	
49	00.00	4661.11	3948.58	3784.87	23.94	17.27	167.65	790.12	-164.15	2125.502		86.58	
50	00.00	4757.22	4024.98	3853.99	24.36	17.89	167.87	821.86	-171.38	2189.88 2	164.80	87.31	
<b>5</b> 4	00.00	4054.04	4400 40	2025.00	24.75	40.50	100.01	054.40	470 04	0054.00.0	າວຣ ຄາ	97.07	
	LAU.LAU	4854.24	4103.49	3925.02	24.75	16.53	168.04	054.40	-178.81	2251.62 2	ZZ0.U3	87.97	



**Anticollision Report** 

Company: Field: Reference Site:

Reference Well:

Reference Wellpath: 1

**BILL BARRETT CORP** 

CARBON COUNTY, UTAH PRICKLY PEAR 4-22D PAD

PRICKLY PEAR UF #6-22D-12-15

Date: 12/20/2007

Time: 10:03:42

Page: 10

Well: PRICKLY PEAR UF #6-22D-12-15 Co-ordinate(NE) Reference: Vertical (TVD) Reference: SITE 7199.7

Db: Sybase

Site:

PRICKLY PEAR 4-22D PAD PRICKLY PEAR UF #14-15D-12-15 Well:

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error:

Ι.	wепраш:	1 VU Plar	1: Plan #1 \	/1						Inter-Site Error:	0.00	ft	
П	Refe	rence	O	ffset	Semi-M	Lajor Axis	3	Offset	Location	Ctr-Ctr Edge	Separation		
П	MD	TVD	MD	TVD	Ref	Offset	TFO-HS		East	Distance Distance		Warning	
П	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft ft			
П	5200.00	4952.04	4184.01	3997.87	25.09	19.18	168.17	887.91	-186.44	2310.65 2284.56	88.57		
Н	5300.00	5050.50	4266.45	4072.45	25.40	19.85	168.26	922.14	-194.24	2366.91 2340.35	89.11		
П	5400.00	5149.52	4350.69	4148.67	25.66	20.53	168.32	957.13	-202.21	2420.33 2393.31	89.60		
	5500.00	5248.96	4436.65	4226.44	25.87	21.23	168.35	992.84	-210.35	2470.84 2443.40	90.03		
	5600.00	5348.71	4524.21	4305.66	26.04	21.95	168.35	1029.20	-218.64	2518.41 2490.56	90.43		
	5700.00	5448.64	4613.27	4386.24	26.17	22.67	168.33	1066.19	-227.07	2562.97 2534.74	90.78		
П	5800.00	5548.64	4703.57	4467.93	26.26	23.41		1103.69		2604.85 2576.84	93.00		
H	5900.00	5648.64	5476.80	5202.17	26.36	27.34	0.30	1332.68	-287.81	2636.27 2605.93	86.87		
	6000.00	5748.64	6025.81	5748.64	26.47	28.40			-297.49	2640.66 2610.60	87.87		
	6100.00	5848.64	6125.81	5848.64	26.58	28.49	0.00	1375 18	-297.49	2640.66 2610.25	86.86		
П	6200.00	5948.64	6225.81	5948.64	26.69	28.59			-297.49	2640.66 2609.90	85.87		
	6300.00	6048.64	6325.81	6048.64	26.80	28.68			-297.49	2640.66 2609.55	84.90		
li	6400.00	6148.64	6425.81	6148.64	26.91	28.78			-297.49	2640.66 2609.20	83.94		
	6500.00	6248.64	6525.81	6248.64	27.02	28.88			-297.49	2640.66 2608.84	83.00		
	6600.00	6348.64	6625.81	6348.64	27.14	28.98	0.00	1275 19	-297.49	2640.66 2608.48	82.07		
-	6700.00	6448.64	6725.81	6448.64	27.25	29.08			-297.49	2640.66 2608.12	81.15		
-	6800.00	6548.64	6825.81	6548.64	27.37	29.18			-297.49	2640.66 2607.75	80.25		
ļ	6900.00	6648.64	6925.81	6648.64	27.49	29.28			-297.49	2640.66 2607.79	79.37		
	7000.00	6748.64	7025.81	6748.64	27.61	29.39			-297.49	2640.66 2607.02	78.50		
	1 000.00	07-10.04	7 023.01	0770.04	21.01	29.39	0.09	1373.10	-231.49	2040.00 2007.02	70.50		
	7100.00	6848.64	7125.81	6848.64	27.73	29.49	0.09	1375.18	-297.49	2640.66 2606.65	77.65		
	7200.00	6948.64	7225.81	6948.64	27.86	29.60	0.09	1375.18	-297.49	2640.66 2606.27	76.81		
	7300.00	7048.64	7325.81	7048.64	27.98	29.71	0.09	1375.18	-297.49	2640.66 2605.90	75.98		
-													

## PRESSURE CONTROL EQUIPMENT - Schematic Attached

- A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer. The blow out preventer will be equipped as follows:
  - 1. One (1) blind ram (above).

2. One (1) pipe ram (below).

- 3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
- 4. 3-inch diameter choke line.
- 5. Two (2) choke line valves (3-inch minimum).
- 6. Kill line (2-inch minimum).

7. Two (2) chokes.

- 8. Two (2) kill line valves, one of which shall be a check valve (2-inch minimum).
- 9. Upper kelly cock valve with handles available.
- 10. Safety valve(s) & subs to fit all drill string connections in use.
- 11. Pressure gauge on choke manifold.
- 12. Fill-up line above the uppermost preventer.
- B. Pressure Rating: 3,000 psi
- C. Testing Procedure:

#### Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum the above pressure test will be performed:

- 1. When the annular preventer is initially installed;
- 2. Whenever any seal subject to test pressure is broken;
- 3. Following related repairs; and
- 4. At thirty (30) day intervals.

In addition, the Annular Preventer will be functionally operated at least weekly.

## <u>Blow-Out Preventer</u>

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yieldstrength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be

maintained for a period of at least ten (10) minutes or until the requirments of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

- 1. When the BOP is initially installed;
- 2. Whenever any seal subject to test pressure is broken;
- 3. Following related repairs; and
- 4. At thirty (30) day intervals.

In addition the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

## D. Choke Manifold Equipment:

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

#### E. Accumulator:

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in the Onshore Oil & Gas Order Number 2.

A manual locking device (i.e. hand wheels) or automatic locking device will be installed on all systems of 2M or greater. A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

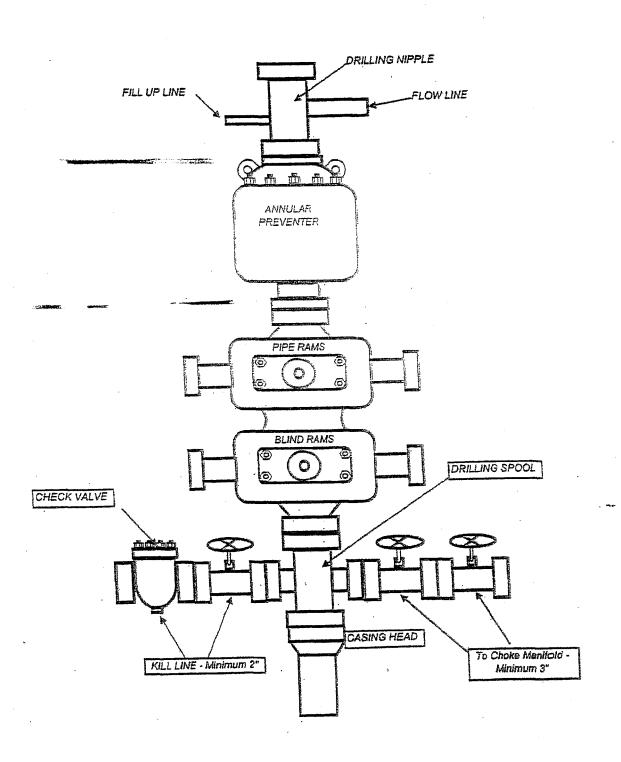
Remote controls shall be readily accessible to the driller. Remote controls for all 3M or greater systems will be capable of closing all preventers. Remote controls for 5M or greater systems will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

#### F. Miscellaneous Information:

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of Onshore Oil & Gas Order Number 2. The choke manifold will be located outside the rig sub-structure. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.

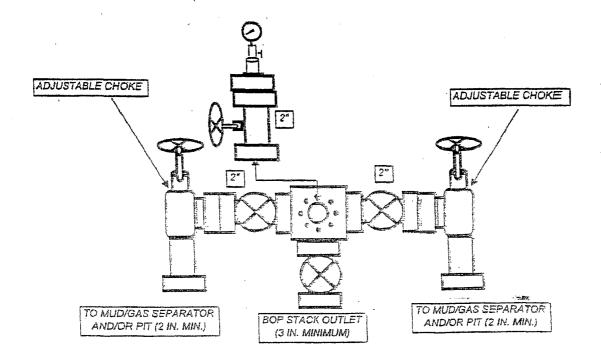
A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

# BILL BARRETT CORPORATION TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER



# BILL BARRETT CORPORATION

## TYPICAL 3,000 p.s.i. CHOKE MANIFOLD



#### **SURFACE USE PLAN**

# BILL BARRETT CORPORATION Prickly Pear Unit Federal #3-22-12-15 Pad Wells

Prickly Pear Unit Federal #4-22D-12-15

NENW, 722' FNL, 2247' FWL, Sec. 22, T12S-R15E (surface) NWNW, 660' FNL, 660' FWL, Sec. 22, T12S-R15E (bottom hole)

Carbon County, Utah

Prickly Pear Unit Federal #6-22D-12-15

NENW, 716' FNL, 2279' FWL, Sec. 22, T12S-R15E (surface) SENW, 1980' FNL, 1980' FWL, Sec. 22, T12S-R15E (bottom hole)

Carbon County, Utah

Prickly Pear Unit Federal #14-15D-12-15

NENW, 712' FNL, 2294' FWL, Sec. 22, T12S-R15E (surface) SESW, 660' FSL, 1980' FWL, Sec. 15, T12S-R15E (bottom hole)

Carbon County, Utah

Prickly Pear Unit Federal #13-15D-12-15

NENW, 719' FNL, 2263' FWL, Sec. 22, T12S-R15E (surface) SWSW, 660' FSL, 660' FWL, Sec. 15, T12S-R15E (bottom hole)

Carbon County, Utah

The onsite for this pad was conducted on December 11<sup>th</sup>. This is an existing pad with one vertical and three directional wells (the 3-22-12-15, 7-22D, 5-22D, 11-15D) and four additional directional wells are planned.

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

#### 1. Existing Roads:

- a. The existing well pad is located approximately 47 miles from Myton, Utah. Maps reflecting directions to the proposed well pad are enclosed (see Topographic Maps A and B).
- b. An access road, approximately 65 feet in length, exists to this pad.
- c. Surface disturbance and vehicular travel would be limited to the approved existing access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- d. BBC would be responsible for all maintenance of the access road including drainage structures.
- e. The use of roads under State and County Road Department maintenance is necessary to access the Prickly Pear Unit. However, an encroachment permit is not anticipated since no upgrades to the State or County road systems are proposed at this time.
- f. All existing roads would be maintained and kept in good repair during all phases of operation.
- g. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

#### 2. Planned Access Road:

a. A new access road, approximately 150 feet, would be needed to access these additional wells to avoid the existing wellheads on the pad. A road design plan is not anticipated at this time.

- b. The access road would consist of an 18 foot travel surface within a 32 foot disturbed area. The proposed access has been placed to minimize impact to the environment and natural drainage of the area.
- c. BLM approval to construct this access road is requested with this application.
- d. A maximum grade of 10% would be maintained throughout the project with minimal cuts and fills, as necessary, to access the wells on the pad.
- e. The access road would be constructed using standard equipment and techniques. Bulldozers and/or road graders would first clear vegetation and topsoil from the ROW. These materials may be windrowed for future redistribution during the reclamation process. The surface would be crowned to facilitate drainage to a borrow ditch on each side of the road designed to minimize erosion potential. Following completion of the wells on this pad, graveling or capping the roadbed may be performed as necessary to provide a well constructed, safe road.
- f. No turnouts are proposed, good site distance exists along this road
- g. Adequate drainage structures would be incorporated, where necessary.
- h. No surfacing material would come from Indian lands or off-lease Federal lands. BBC requests that any excess rock from construction of the pad be used for surfacing of the access road, if necessary. Any additional materials needs may come from either existing SITLA Materials Permits or from federal wells within the Prickly Pear unit.
- i. No gates or cattle guards are anticipated at this time.
- j. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project-related traffic.
- k. All access roads and surface disturbing activities would conform to the appropriate standard, no higher than necessary, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface

  Operating Standards for Oil and Gas Exploration and Development, Fourth Edition—
  Revised 2007.
- 1. The operator would be responsible for all maintenance of the access road including drainage structures.
- 3. <u>Location of Existing Wells (see Topographic Map C):</u>
  - a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed well:

water wells none i. ii. injection wells none iii. disposal wells none iv. drilling wells none temp shut-in wells one v. vi. producing wells fourteen vii. abandoned wells one

#### 4. Location of Production Facilities (see enclosed "Proposed Facility Layout Plat"):

- a. All facilities for this pad would be located adjacent to the existing facilities for the Prickly Pear 3-22 pad, as noted on the enclosed diagram (some permanent structures/facilities may be shared). Each well would have its own meter run and separator and five (5) 400-bbl tanks would be installed as necessary.
- b. In order to allow safe simultaneous drilling and completion operations and to minimize pad size, wellheads and christmas trees may be positioned below location grade in a precast concrete vault measuring approximately 12' wide, 10' deep, and 64' long. Other than when drilling is occurring and when necessary well servicing is being conducted, the vault would be covered with a grate and/or isolated by fencing.
- c. All permanent above-ground structures would be painted a flat, non-reflective Olive Black to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.
- d. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to.
- e. Gas meter runs would be constructed and located on lease within 500 feet of the wellheads. Meter runs are housed and/or fenced. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3. Use of electronic flow meters (EFM) for gas measurement purposes is requested with this application. Use of flow conditioners is also being requested (versus straightening vanes).
- f. A tank battery exists on this lease and may be modified as per the proposed facility layout to include additional equipment. All loading lines and valves would be placed inside the berm surrounding the tank battery or would have a secondary containment vessel. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil. BBC requests permission to install the necessary production/operation facilities with this application.
- g. Any necessary pits would be properly fenced to prevent any wildlife and livestock entry.
- h. All access roads would be maintained as necessary to prevent erosion and accommodate year-round traffic as practicable. The roads would be maintained in a safe, useable condition.
- The site would require periodic maintenance to ensure that drainages are kept open and free of debris and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.
- j. A 6-inch, surface-laid gas pipeline (approximately 250 feet) exists on this location. To tie-in the additional wells being added, approximately 238 feet of new pipeline is necessary and is being applied for at this time. The proposed gas pipeline would leave the west end of the well pad and tie in to an existing 12-inch surface-laid pipeline. A 50 foot pipeline corridor is proposed.

k. It is proposed for this application that the gas pipeline be surface-laid due to soil conditions that would require blasting. In addition, the 6-inch line that exists is also surface-laid.

#### 5. <u>Location and Type of Water Supply:</u>

- a. Bill Barrett Corporation would use water consistent with approvals granted by the Utah State Engineer's Office under Application Number 90-1846 (T76109) which expires March 27, 2008 (renewal application applied for) or an existing water well in Sec. 13, T12S-R14E granted by the Utah State Engineer's Office under Application Number 90-1849 (T75896) which expires September 13, 2008.
- b. Water use for this location would most likely be diverted from Nine Mile Creek, the N¼ of Section 3, T12S-R14E. Bobtail trucks would haul the water, traveling Prickly Pear road to Harmon Canyon, traveling north to this point of diversion.

#### 6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be taken off-lease.
- c. If any additional gravel is required, it would be obtained from SITLA materials permits or would be taken from federal BBC locations within the Prickly Pear unit.

#### 7. <u>Methods of Handling Waste Disposal:</u>

- a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.
- b. Drill cuttings would be contained and buried on site.
- c. The reserve pit would be located outboard of the location along the southeast side of the pad.
- d. The reserve pit would be constructed so as not to leak, break or allow any discharge.
- e. If necessary, the reserve pit would be lined with 12 mil minimum thickness polyethylene nylon reinforced liner material. The liner would overlay straw, soil and/or bentonite if rock is encountered during excavation. The pit liner would overlap the pit walls and be anchored with soil and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner would be disposed of in the pit. Pit walls would be sloped no greater than 2:1 and the depth of the reserve pit would be approximately 8 feet with a minimum of 2 foot of freeboard
- f. The reserve pit has been located in cut material. Three sides of the reserve pit would be fenced before drilling starts. The fourth side would be fenced as soon as drilling is completed and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production would be rehabilitated as per the plans for reclamation of surface (10. below).

- g. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) in quantities over 10,000 pounds that may be used, produced, stored, transported or disposed of annually in association with the drilling, testing or completion of the wells include diesel fuel, silica sand and hydrochloric acid. This material would be consumed in the drilling and completion process. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- h. Trash would be contained in a trash cage or roll-off container and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container would be hauled off periodically an approved landfill.
- Produced fluids from each well, other than water, would be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, salt water or other produced fluids would be cleaned up and removed.
- j. After initial clean-up and based on volumes, BBC would install a tank (maximum size 400 barrel capacity) to contain produced waste water. After first production, produced wastewater would be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. Thereafter, produced water would be used in further drilling and completion activities, evaporated in the pit, or hauled toa State approved disposal facility.
- k. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- Sanitary facilities would be on site at all times during operations. Sewage would be
  placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed
  contractor to transport by truck the portable chemical toilet so that its contents can be
  delivered to the Price or Vernal Wastewater Treatment Facility in accordance with state
  and county regulations.
- m. Any liquid hydrocarbons produced during completion work would be contained in test tanks on the well location. The tanks would be removed from location at a later date.
- n. A flare pit may be constructed a minimum of 110' from the wellheads and may be used during completion work. In the event a flare pit proves to be unworkable in this situation, a flare stack would be installed. BBC would flow back as much fluid and gas as possible into vessels, separating the fluid from the gas. The fluid would then be either returned to the reserve pit or placed into a tank. Gas would be then directed into the flare pit or the flare stack with a constant source of ignition. This should assist in eliminating any fires in and around the reserve pit. Natural gas would be directed to the pipeline as soon as pipeline gas quality standards are met.
- o. Hydrocarbons would be removed from the reserve pit as soon as practical. In the event immediate removal is not practicable, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

#### 8. Ancillary Facilities:

a. Garbage containers and portable toilets are the only ancillary facilities proposed in this application

Bill Barrett Corporation
Surface Use Plan
Prickly Pear Unit Federal 3-22-12-15 Pad
Carbon County, Utah

#### 9. Well Site Layout:

- a. Each well would be properly identified in accordance with 43 CFR 3162.6.
- The rig layout and cross section diagrams are enclosed (see Location Layout and Cross Section Plats).
- The pad and road designs are consistent with BLM specifications.
- d. The pad for these additional wells has been staked at its maximum size of 488' x 172' with a reserve pit size of 200' x 100' and a 75' x 100' staging area.
- e. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
- f. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- g. Diversion ditches would be constructed, if necessary, around the well pad to prevent surface waters from entering the area.
- h. The stockpiled topsoil (first 6 inches or maximum available) would be stored in a windrow on the uphill side of the location to prevent any possible contamination. All topsoil would be stockpiled for reclamation in such a way as to prevent soil loss and contamination.
- i. Pits would remain fenced until site cleanup.
- j. If air drilling occurs, the blooie line would be located at least 100 feet from the individual well head and would run from the wellhead directly to the pit.
- k. Water application may be implemented if necessary to minimize the amount of fugitive dust.

#### 10. Plan for Restoration of the Surface:

#### Producing Wells

- a. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location.
- b. The reserve pit would be closed as soon as reasonably practical, but no later than 90 days from completion of the last well on the pad, provided favorable weather conditions and that there are no plans to re-use the pit within one year. An extension may be given at the discretion of the BLM Authorized Officer. The following are requirements for pit closures:
  - Squeezing of pit fluids and cuttings is prohibited;
  - Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil;

Bill Barrett Corporation
Surface Use Plan
Prickly Pear Unit Federal 3-22-12-15 Pad
Carbon County, Utah

- Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade;
- If a liner was used, the polyethylene nylon reinforced liner shall be torn and perforated before backfilling;
- The operator will be responsible for re-contouring any subsidence areas that develop from closing a pit before it is sufficiently dry.
- The operator shall contact the BLM Authorized Officer at least 48-hours prior to the filling and reclamation of pits and the start of any reclamation such as recontouring and reseeding.
- c. Reclamation requirements would be dependent upon plans for subsequent drilling activity on the pad. The operator shall contact the BLM Authorized Officer within 60 days of completion of the last well on the pad and provide plans for subsequent pad use.
  - In the event that the operator plans to re-occupy the pad within three years, the operator shall seed the unused portions of the pad with a cover crop as approved for this use by the BLM. If necessary, this cover crop will be replanted each year that the pad remains in an un-reclaimed state. Unless otherwise specifically authorized, no pad shall remain in an un-reclaimed state for more than three years.
    - Cover crops will be seeded by broadcasting seed over all unused portions of the pad. Seed will be covered with soil to the appropriate depth by raking or other methods.
  - In the event there are no plans to re-occupy the pad within three years, interim
    reclamation activities will begin within 90 days, assuming favorable weather
    conditions. The operator will use the BLM approved seed mix and will seed
    during the first suitable seeding season.
    - o Interim reclamation drill seeding will be conducted on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% would be used.
  - Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the BLM prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.
- d. The operator would control noxious weeds along access road use authorizations, pipeline route authorizations, well sites or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate county extension office. On BLM administered land it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.

Bill Barrett Corporation
Surface Use Plan
Prickly Pear Unit Federal 3-22-12-15 Pad
Carbon County, Utah

#### Dry Hole

a. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc. would be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.

#### 11. <u>Surface and Mineral Ownership:</u>

- a. Surface ownership Federal under the management of the Bureau of Land Management Price Field Office, 125 South 600 West, Price Utah 84078; (435) 636-3600.
- b. Mineral ownership Federal under the management of the Bureau of Land Management Price Field Office, 125 South 600 West, Price Utah 84078; (435) 636-3600.

#### 12. Other Information:

- a. Montgomery Archaeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as MOAC Report No. 06-213 dated May 16, 2006.
- b. BBC would identify areas in our drilling program where fluids escaping the wellbore and exiting onto a hillside might occur. In those cases, BBC would be ready with cement and/or fluid loss compounds (types of lost circulation fluids) to heal up vags and cracks. Upon individual evaluation of the proposed well sites, BBC may air drill the hole to surface casing depth if necessary.
- c. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24" to 48" wide and is approximately 10' tall. Combustor placement would be on existing disturbance and would not be closer than 100' to any tank or wellhead.

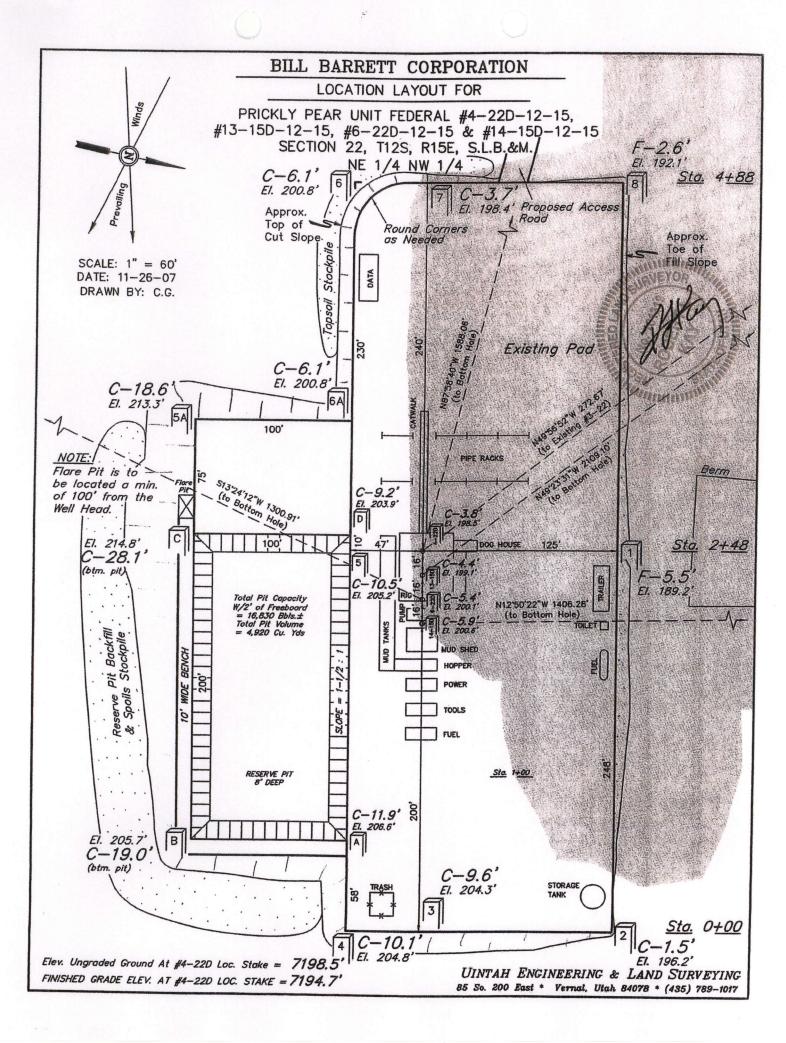
#### **OPERATOR CERTIFICATION**

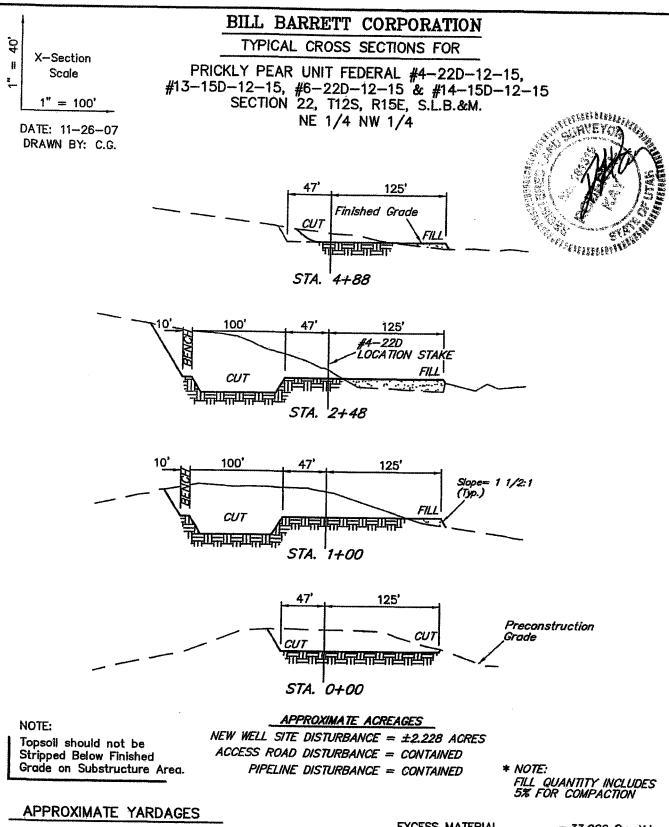
#### Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this day of Name: Tracey Fallang Position Title: Regulatory Analyst 1099 18th Street, Suite 2300, Denver, CO 80202 Address: Telephone: 303-312-8134 Field Representative Fred Goodrich Address: 1820 W. Hwy 40, Roosevelt, UT 84066 Telephone: 435-725-3515 E-mail:

Tracey Faltang, Environmental/Regulatory Analyst





CUT (6") Topsoil Stripping 1,490 Cu. Yds. (New Construction Only) Remaining Location

= 36,220 Cu. Yds.

TOTAL CUT *37,710* CU. YDS. **FILL** 4,630 CU. YDS.

EXCESS MATERIAL =33,080 Cu. Yds. Topsoil & Pit Backfill = 3,950 Cu. Yds. (1/2 Pit Vol.) **EXCESS UNBALANCE** = 29,130 Cu. Yds.

(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East \* Vernal, Utah 84078 \* (485) 789-1017

PRICKLY PEAR UNIT FEDERAL #4-22D-12-15, #13-15D-12-15, #14-15D-12-15, & #6-22D-12-15 LOCATED IN CARBON COUNTY, UTAH SECTION 22, T12S, R15E, S.L.B.&M.

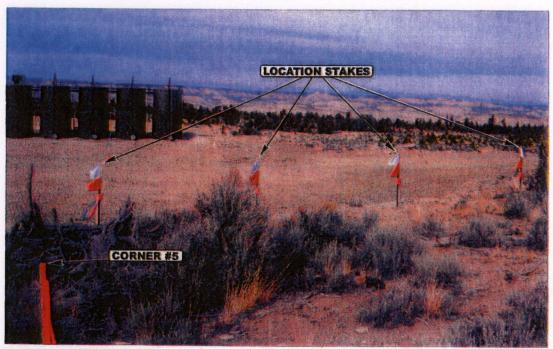


PHOTO: VIEW OF LOCATION STAKE

**CAMERA ANGLE: NORTHWESTERLY** 

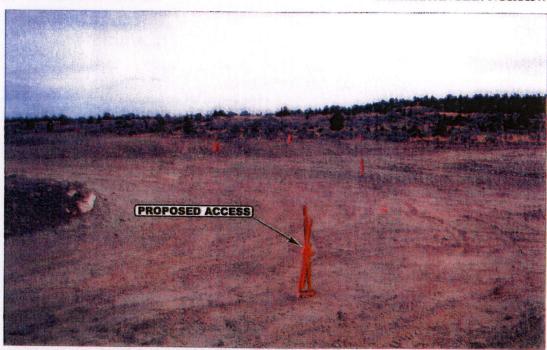


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

**CAMERA ANGLE: SOUTHEASTERLY** 

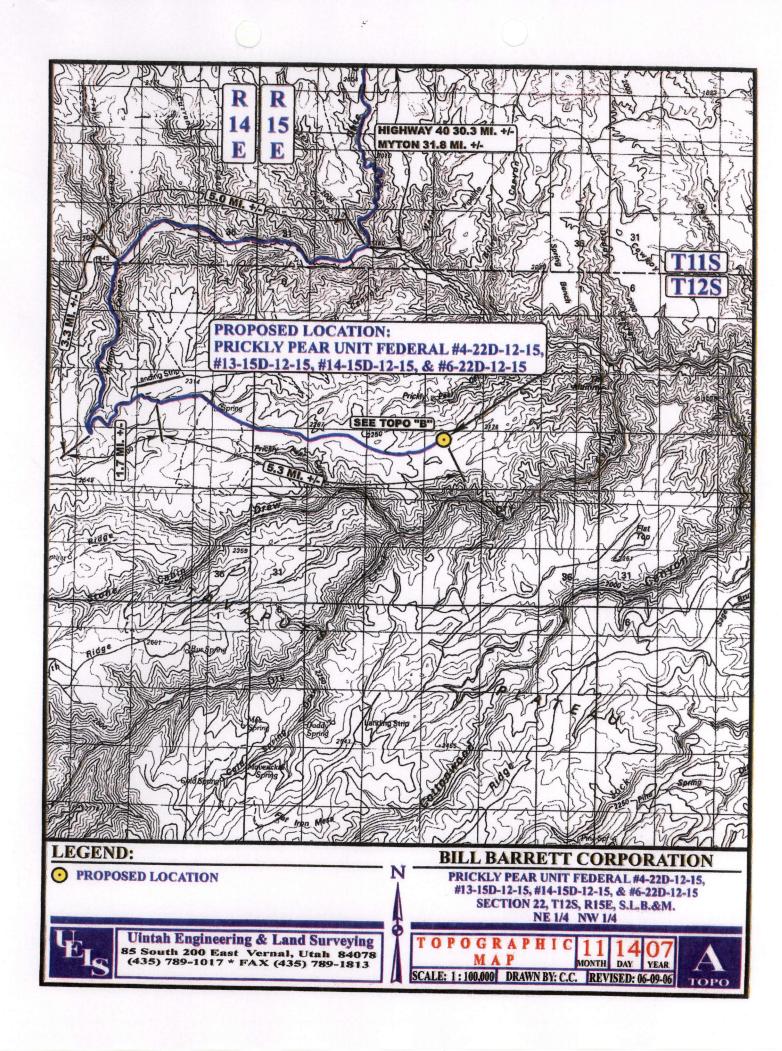


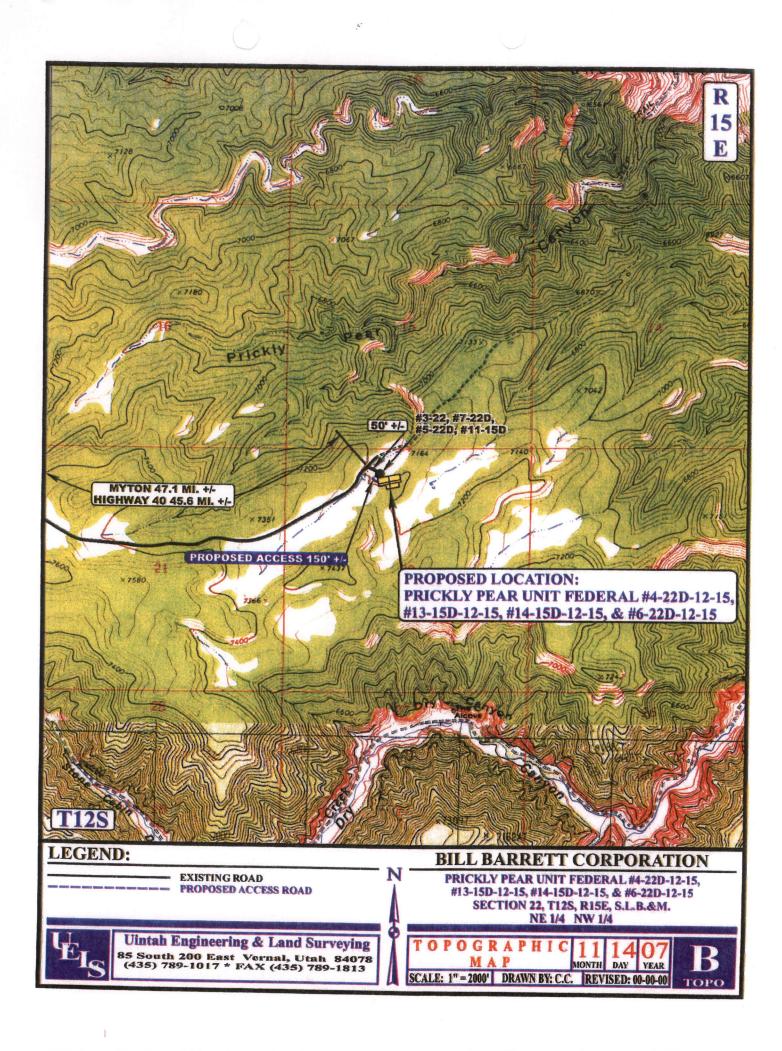
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

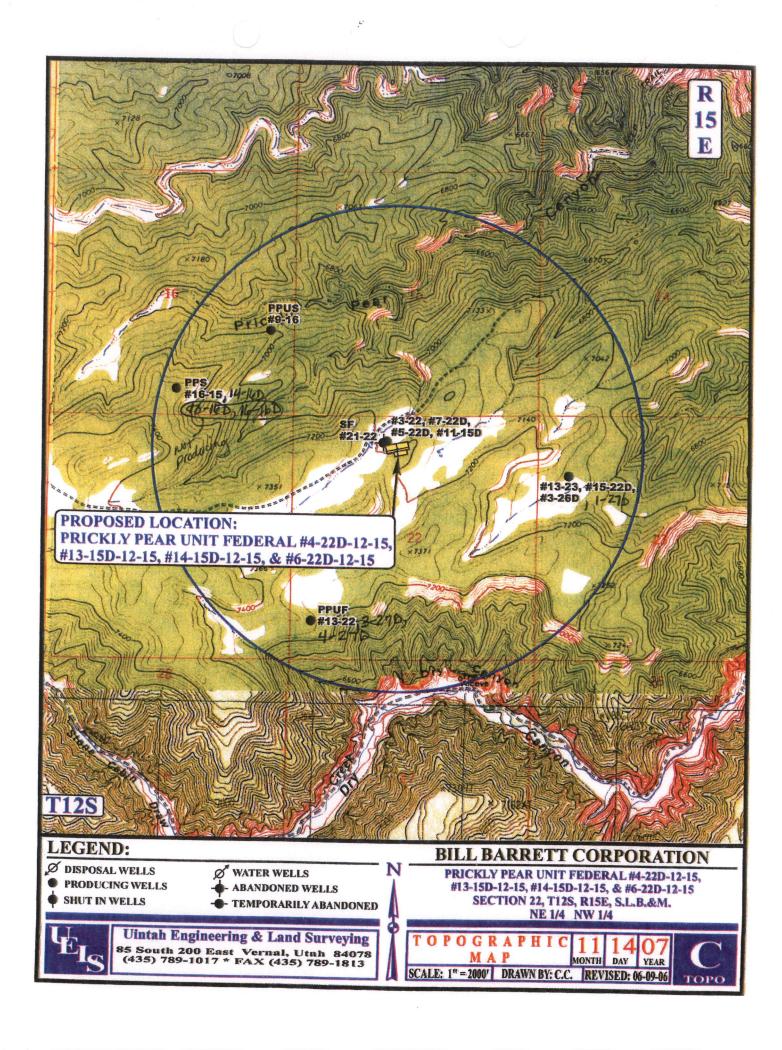
**LOCATION PHOTOS** 

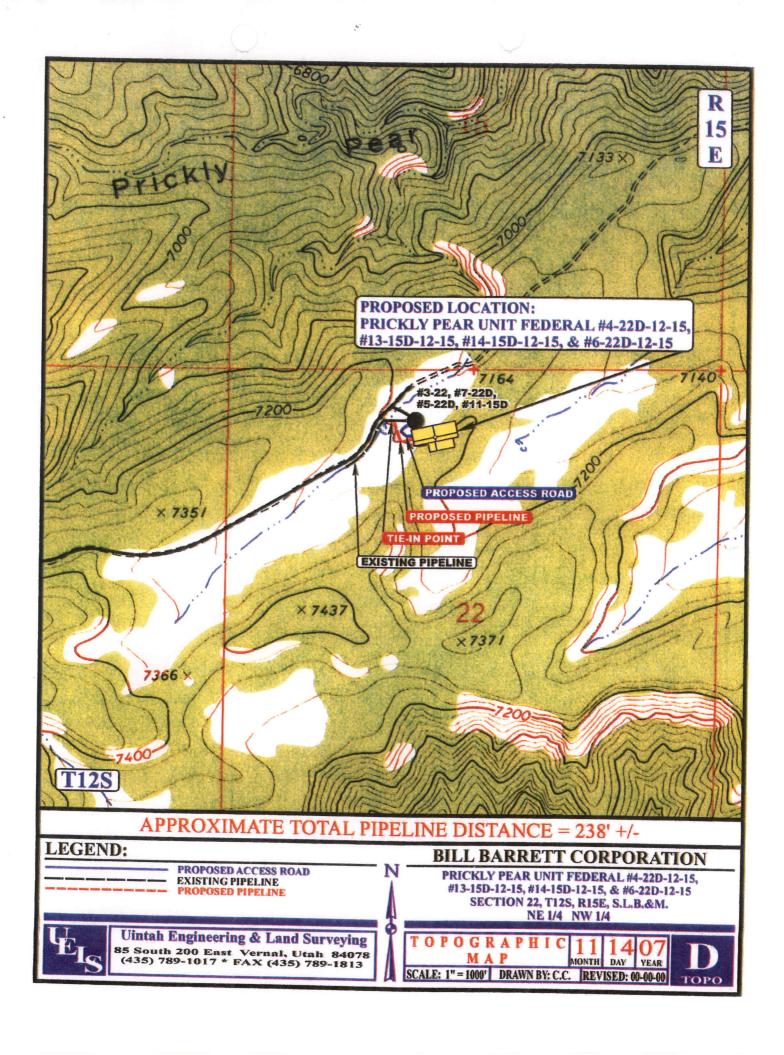
MONTH DAY YEAR TAKEN BY: J.M. DRAWN BY: C.C. REVISED: 00-00-00

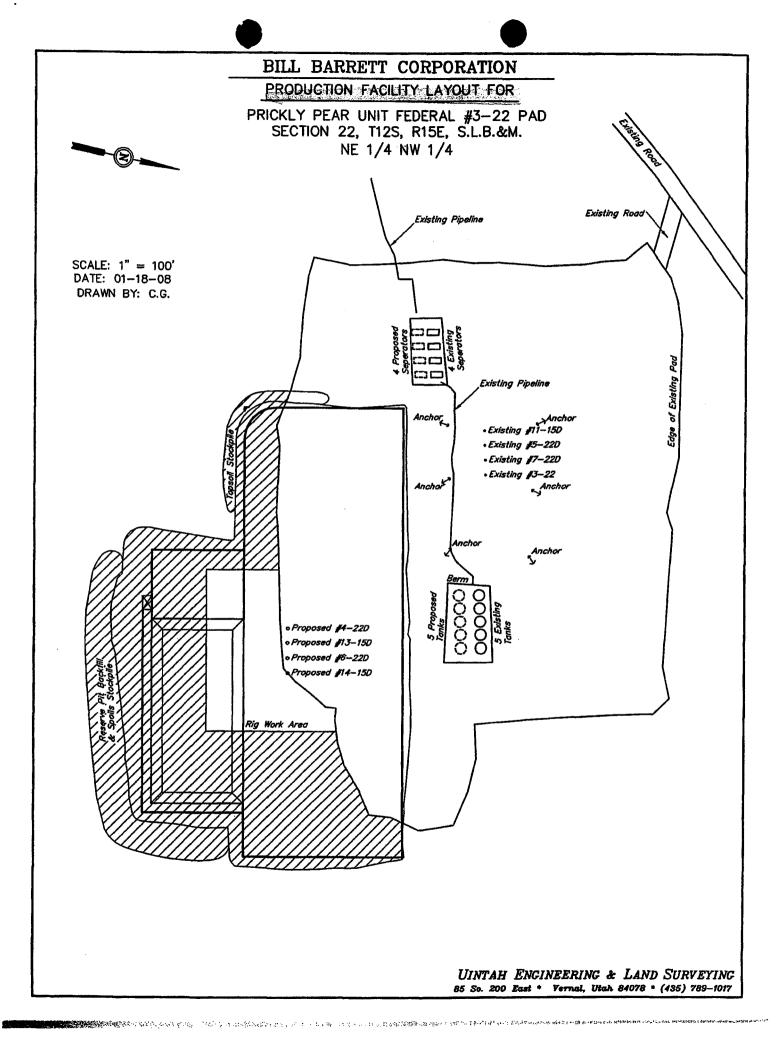
PHOTO



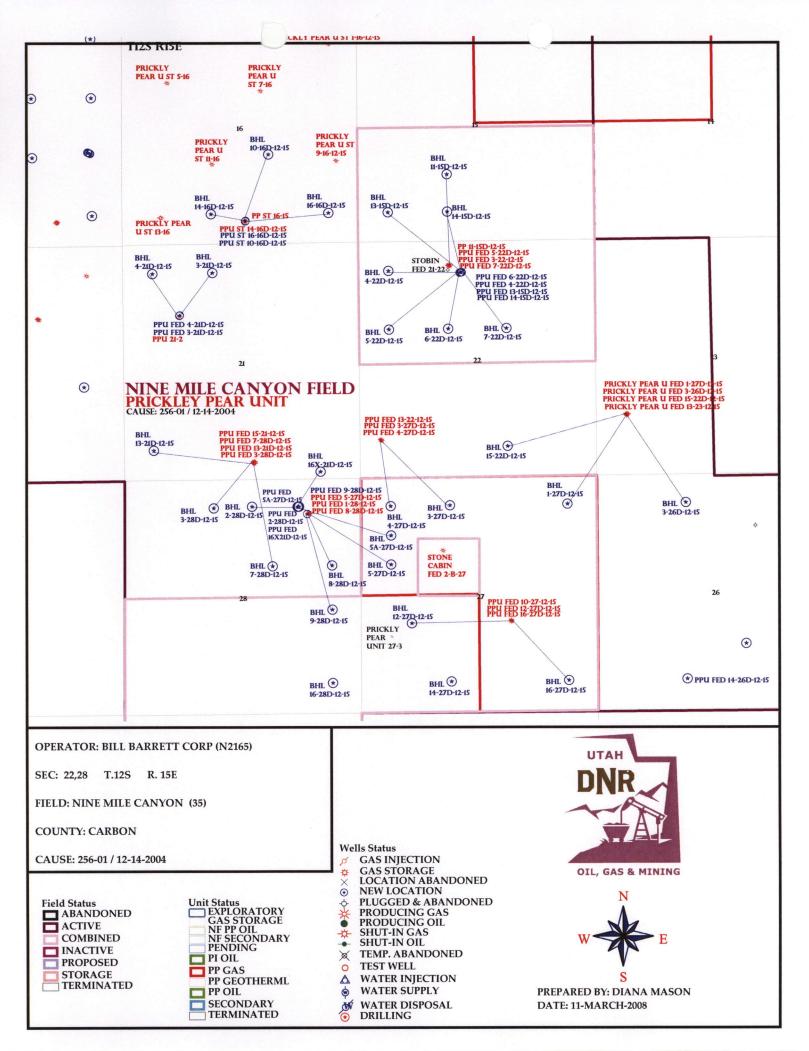








APD RECEIVED	: 03/07/2008		API NO. ASSIG	NED: 43-00	7-31361	
OPERATOR:	PPU FED 6-22D-12-15 BILL BARRETT CORP ( N2165 ) TRACEY FALLANG		PHONE NUMBER:	303-312-813	4	
PROPOSED LOC	ATION:		INSPECT LOCATN	BY: /		
NENW 22 120S 150E SURFACE: 0716 FNL 2279 FWL BOTTOM: 1980 FNL 1980 FWL COUNTY: CARBON			Tech Review	Initials	Date	
			Engineering			
			Geology		<u></u>	
	39.76459 LONGITUDE: -110.2236 ASTINGS: 566503 NORTHINGS: 4401	708	Surface			
FIELD NAME	: NINE MILE CANYON ( 35	)				
LEASE NUMBER	1 - Federal : UTU-011604 R: 1 - Federal		PROPOSED FORMAT		V	
RECEIVED AND	/OR REVIEWED:	LOCATI	ON AND SITING:			
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. WYB000040)		R649-2-3.				
		Unit: PRICKLY PEAR				
Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit (No. 90-1846)			.649-3-2. Gener iting: 460 From Qt		tetwoon Wolls	
			.649-3-3. Excep			
			rilling Unit			
RDCC Review (Y/N) (Date:)			Board Cause No: <u>254-01</u> Eff Date: 12-14-2004			
MM Fee Surf Agreement (Y/N)			Siting: 460's whar & wicomm. Track			
Intent	to Commingle (Y/N)	<b>✓</b> R	.649-3-11. Dire	ctional Dri	11	
	:	rne O				



## **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 11, 2008

#### Memorandum

To:

Assistant Field Office Manager Resources,

Moab Field Office

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Prickly Pear Unit

Carbon County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Prickly Pear Unit, Carbon County, Utah.

API#

**WELL NAME** 

LOCATION

(Proposed PZ Price River)

43-007-31358 PPU Fed 13-15D-12-15 Sec 22 T12S R15E 0719 FNL 2263 FWL BHL Sec 15 T12S R15E 0660 FSL 0660 FWL

43-007-31359 PPU Fed 14-15D-12-15 Sec 22 T12S R15E 0712 FNL 2294 FWL BHL Sec 15 T12S R15E 0660 FSL 1980 FWL

43-007-31360 PPU Fed 4-22D-12-15 Sec 22 T12S R15E 0722 FNL 2247 FWL BHL Sec 22 T12S R15E 0660 FNL 0660 FWL

43-007-31361 PPU Fed 6-22D-12-15 Sec 22 T12S R15E 0716 FNL 2279 FWL BHL Sec 22 T12S R15E 1980 FNL 1980 FWL

43-007-31362 PPU Fed 2-28D-12-15 Sec 28 T12S R15E 0650 FNL 1412 FEL BHL Sec 28 T12S R15E 0632 FNL 2432 FEL

43-007-31363 PPU Fed 16X-21D-12-15 Sec 28 T12S R15E 0649 FNL 1396 FEL BHL Sec 21 T12S R15E 0138 FSL 0899 FEL

43-007-31364 PPU Fed 5A-27D-12-15 Sec 28 T12S R15E 0648 FNL 1380 FEL BHL Sec 27 T12S R15E 1320 FNL 0660 FWL

This office has no objection to permitting the wells at this time.

bcc: File - Prickly Pear Unit
 Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:3-11-08



Governor

**GARY R. HERBERT** Lieutenant Governor

# **DEPARTMENT OF NATURAL RESOURCES**

MICHAEL R. STYLER Executive Director

**Division of Oil Gas and Mining** 

JOHN R. BAZA Division Director

March 11, 2008

**Bill Barrett Corporation** 1099 18th Street, Suite 2300 Denver, CO 80202

Re:

Prickly Pear Unit Federal 6-22D-12-15 Well, Surface Location 716' FNL, 2279' FWL, NE NW, Sec. 22, T. 12 South, R. 15 East, Bottom Location 1980' FNL, 1980' FWL. SE NW, Sec. 22, T. 12 South, R. 15 East, Carbon County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-31361.

Sincerely,

Gil Hunt

Associate Director

Gil ZLt

pab **Enclosures** 

cc:

Carbon County Assessor

Bureau of Land Management, Moab Office



Operator:	Bill Barrett Corporation				
Well Name & Number	Prickly Pear Unit Federal 6-22D-12-15				
API Number:	43-007-	31361	·		
Lease:	UTU-0	11604			
Surface Location: <u>NE NW</u>	Sec. 22	T. 12 South	<b>R.</b> 15 East		
Bottom Location: SE NW	Sec. 22	<b>T.</b> 12 South	<b>R.</b> 15 East		

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Form 3160-3 (August 2007)



CONFIDENTIAL

TORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

Lease Serial No.

UTU-011604 -- 7 6. If Indian, Allotee or Tribe Name

#### DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER

UNITED STATES

AFFLICATION TON FEMALE TO	IWA					
la. Type of work:  DRILL  REENTER				7. If Unit or CA Agreement, Name and No. Prickly Pear / UTU-79487		
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone ☐ Multiple Zone ☐ Single Zone ☐ Gas Well ☐ Other ☐ Single Zone ☐ Single Zone ☐ Other ☐ Single Zone ☐ Multiple Zone ☐ Single Zone ☐ Single Zone ☐ Single Zone ☐ Single Zone ☐ Other ☐ Single Zone ☐ Multiple Zone ☐ Single Zone ☐ Other ☐ Single Zone ☐ Single Zone ☐ Other ☐ Single Zone ☐ Sing				-22D-12-15		
2. Name of Operator Bill Barrett Corporation				9. API Well No. pending 43.00	7.31	341 <u> </u>
3a. Address 1099 18th Street, Suite 2300 Denver, CO 80202	3a. Address 1099 18th Street, Suite 2300 3b. Phone No. (include area code) 1			10. Field and Pool, or Exploratory Prickly Pear/Wasatch-Mesaverde		
4. Location of Well (Report location clearly and in accordance with an	ty State	requirements.*)		11. Sec., T. R. M. or B	lk.and Su	rvey or Area
At surface NENW, 716' FNL, 2279' FWL				Sec. 22, T12S-R15	Ē	
At proposed prod. zone SENW, 1980' FNL, 1980' FWL, Ser	c. 22					
14. Distance in miles and direction from nearest town or post office* approximately 45 miles from Myton, Utah				12. County or Parish Carbon County		13. State UT
15. Distance from proposed* 716' SH / 1980' BH location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	1		ng Unit dedicated to this well 40 acres			
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	15: TToposou Bepai			/BIA Bond No. on file wide Bond #WYB000040		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	ations (Show whether DF, KDB, RT, GL, etc.)  22. Approximate date work will start*		t*	23. Estimated duration		
7200' graded ground	05/	15/2008		45 days		
	24.	Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil a	and Gas Order No.1, must be at	tached to th	is form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).</li> <li>Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>Operator certification</li> <li>Such other site specific information and/or plans as may be required by the BLM.</li> </ol>						
25. Signature Gallanes		Name (Printed/Typed) Tracey Fallang  Date  O  Date			1/08	
Title Environmental/Regulatory Analyst						
Approved by (Significant Michael Stiewig		Name (Printed/Typed)		And the second s	Din	2 0 2008
Application approval toes not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	is legal	Office PRICE FIEL	_		entitle the	applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	rime fo	or any person knowingly and w matter within its jurisdiction.	villfully to n	nake to any department o	or agency	of the United

(Continued on page 2)

\*(Instructions on page 2)

CONDITIONS OF APPROVAL ATTACHED

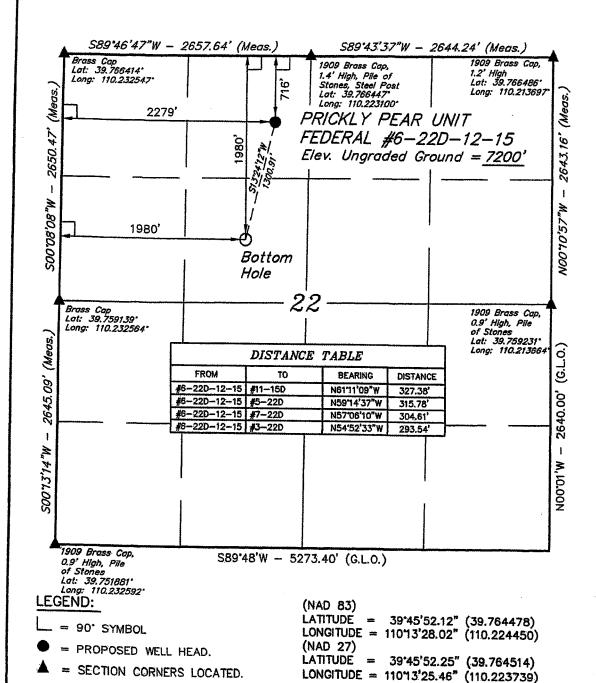
**RECEIVED** 

JUN 2 6 2008

DIV. OF OIL, GAS & MINING

**UDOGM** 

## T12S, R15E, S.L.B.&M.



### BILL BARRETT CORPORATION

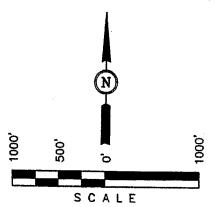
Well location, PRICKLY PEAR UNIT FEDERAL #6-22D-12-15, located as shown in the NE 1/4 NW 1/4 of Section 22, T12S, R15E, S.L.B.&M., Carbon County, Utah.

#### BASIS OF ELEVATION

COTTON TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 31, T12S, R16E, S.L.B.&M. TAKEN FROM THE TWIN HOLLOW QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7386 FEET.

#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



#### CERTIFICATE

REGISTERED EARLY SURVENOR REGISTRATION NO. 181/19

### UINTAH ENGINEERING 85 SOUTH 200 EAST

LAND SURVEYING
VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 11-12-07	DATE DRAWN: 11-26-07	
D.R. J.M. C.G.	REFERENCES G.L.O. PLAT		
WEATHER COLD	FILE BILL BARRET	T CORPORATION	



## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**



**PRICE, UT 84501** 

(435) 636-3600



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

**Bill Barrett Corporation** 

Lease No:

Prickly Pear Unit Federal 6-22D-12-15

API No: 43-013Location:

NENW-Sec.22-T12S-R15E

UTU-11604

Agreement: Prickly Pear (UTU-79487)

<b>Title</b> Acting Field Manager & Authorized Officer:	Name Michael Stiewig	<b>Office Phone Number</b> (435) 636-3633	<b>Cell Phone Number</b> (435) 650-9135
Senior Petroleum Engineer:	Matthew Baker (Primary)	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	James Ashley (Alt.)	(435) 781-4470	(435) 828-7874
Petroleum Engineering Technician Petroleum Engineering Technician	Randy Knight (Primary)	(435) 636-3615	(435) 650-9143
	Walton Willis (Alt.)	(435) 636-3662	(435) 650-9140
NRS/Enviro Scientist:	Nathan Sill (Alt.)	(435) 636-3668	
NRS/Enviro Scientist:	Don Stephens (Primary)	(435) 636-3608	

Fax: (435) 636-3657

#### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Petroleum Tech.) BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings. Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Bill Barrett Corporation
Prickly Pear Unit Federal 6-22D-12-15

Prickly Pear Unit

Lease, Surface: UTU-11604 Bottom-hole: UTU-11604

Location, Surface: NE/NW Sec. 22, T12S, R15E Bottom-hole: SE/NW Sec. 22, T12S, R15E

Carbon County, Utah

A COMPLETE COPY OF THIS APPROVED PERMIT and Conditions of Approval shall be maintained on location during all construction and drilling operations, and shall be available to contractors to ensure compliance.

#### CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Bill Barrett Corporation is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by **WYB000040** (Principal – Bill Barrett Corporation) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of two years from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. Failure to comply with the provisions of this permit, including applicable regulations, stipulations, and/or approval conditions, will be considered a violation subject to the enforcement provisions of 43 CFR Subpart 3163.

#### A. DRILLING PROGRAM

- 1. The proposed 3M BOP system is adequate for anticipated conditions. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
- 2. This well is located on the mesa immediately adjacent to Dry Canyon and Stone Cabin Draw. In order to isolate the wellbore from the canyon wall, the surface casing shall be set to a depth of not less than 1400 feet. This will place the surface casing shoe below the lowest elevation within one mile of the well.
- 3. Surface casing shall be cemented to surface. The cement volume shall be adjusted to accommodate the greater casing length.
- 4. If air drilling operations are utilized, the requirements of Onshore Oil and Gas Order No. 2 (Order 2), Part III.E *Special Drilling Operations*, shall be implemented.
- 5. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining (DOGM) is required before conducting any surface disturbing activities.
- 6. The proposal included a provision for using minor amounts of diesel in the drilling fluid system. Diesel may be added to the system only after cementing the surface casing into place.
- 7. The proposal included options for using one of three different grades of production casing. Any of the three options may be used.
- 8. A cement bond log (CBL) or other appropriate tool for determining top-of-cement, shall be run on the production casing string, unless cement is circulated to surface.
- 9. If logging reveals that the cementing objectives were not met, remedial cementing will be required.
- 10. Locally, the Green River Formation is known to contain oil, gas, oil shale and tar sand deposits. However, the lateral occurrence, distribution and grade of the oil shale and tar sand deposits are not well defined. The operator shall pay particular attention to this section, and shall attempt to identify and describe any of these resources that may be penetrated. Any information obtained on these resources shall be included as part of the Well Completion Report.
- 11. The use of a flow conditioner in lieu of straightening vanes in the gas meter run cannot be approved with the information provided. This proposal is not consistent with the provisions of Onshore Oil & Gas Order No. 5, and as such, can only be considered for approval as a "variance" from Order No. 5. A written request for variance would identify the Order No. 5 requirement(s) from which the variance is being requested, and it would include supporting justification as to how the alternate method of measurement would meet or exceed the minimum standards established in Order No. 5. A variance request for the use of a flow conditioner would also include the make, model, dimensions, and description of use for the specific flow conditioner being proposed.

10. Approval to use an Electronic Flow Computer is granted with the following conditions:

The EFC shall meet or exceed all standards and requirements of Utah NTL 2007-1 regarding the Use of Electronic Flow Computers.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Price Field Office Petroleum Engineer within 24 hours of spudding.
- Notify Price Field Office Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Price Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Price Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Price BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Price Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- Please submit a copy of all other logs run on this well to the BLM Price Field Office.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Price Field Office.

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Price Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide, as a
  minimum, the following informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Price Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Price Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM. Price Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Price Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Price Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Price Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Price Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Price Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Price Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Price Field Office shall be obtained and notification given before
  resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT Price Field Office Price, Utah

#### SURFACE USE CONDITIONS OF APPROVAL

Project Name: Prickly Pear Un	it Drilling			
Operator: Bill Barrett Corpo	ration			
Well:				
<u>Name</u>	Number	Section SH	TWP/RNG	<u>Lease</u> Number
Prickly Pear Unit Federal	6-22D-12-15	22	12S/15E	UTU-11604

#### I Site Specific Conditions of Approval

- 1. A pre-construction field meeting may be conducted prior to beginning any dirt work approved under this APD. The operator shall contact the BLM Authorized Officer Don Stephens @ 435-636-3608 at least 48-hours prior to beginning operations so that the meeting can be scheduled. The operator is responsible for having all contractors present (dirt contractors, drilling contractor, pipeline contractor, project oversight personnel, etc.) including the overall field operations superintendent, and for providing all contractors copies of the approved APD(s), project map and BLM Conditions of Approval pertinent to the work that each will be doing.
- 2. The following appendices are attached for your reference. They are to be followed as conditions of approval:
  - a. SM-A, Seed Mixture for Berms, Topsoil Piles, Pad Margins
  - b. SM-B, Seed Mixture for Final Reclamation (buried pipelines, abandoned pads, roads, etc.)
  - c. TMC1, Browse Hand Planting Tubeling Mixtures
  - d. Lease Stipulations, see attached Table 2.3 from EA for West Tavaputs Plateau Drilling Program.
  - e. Applicant-committed environmental protection measures, see attached Appendix B
- 3. The company shall furnish and apply water or other means satisfactory to the authorized officer for dust control. Dust is controlled when the following standards are met: (1) no dust is generated above the cab of the vehicle, or (2) no hanging dust plumes. These standards are applicable to Nine Mile Canyon between Harmon and Cottonwood Canyons, and in Harmon and Cottonwood Canyons. If dust exceeds these standards, operations shall be shut down until the standards are met.

- 4. The company shall supply a third party monitor to report directly to the BLM which shall monitor for dust on a daily basis, as necessary. A written monitoring report shall be submitted to the BLM on a weekly basis, and a phone report shall be made to the authorized officer on a daily basis, as necessary. If dust control standards are not met, operations shall be shut down until the standards are met.
- 5. The company shall submit interim reclamation plans and location layout with proposed interim reclaimed areas to the authorized office within 90 days of the spudding of the well.
- 6. There is an eligible cultural site (42Cb2085) along the access road. If new construction is required along the access road, the site shall be flagged for avoidance and the pipeline shall be "boomed" into place to further avoid the eligible site.
- 7. The area that encompasses the well location and road is environmentally sensitive including fragile soils and vegetation. The operator may be required to perform special measures such as mulching, erosion fencing, use of erosion fabric, etc. per the direction of the BLM Authorized Officer to stabilize any disturbed areas and ensure the reestablishment of long-term perennial vegetation.
- 8. The operator will be responsible for performing any remediation and/or necessary road upgrading (e.g. elevating, surfacing, culverts, low-water crossings, water-wings, surfacing, etc.) as directed by the BLM Authorized Officer, resulting from untimely access.
- 9. All equipment and personnel used during drilling and construction activities will be restricted to only approve access roads.
- 10. If the well is productive and after completion operations, the road will be upgraded to a **Resource Road** status in accordance with the *Surface Operating Standards for Oil & Gas Exploration and Development*, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.
- 11. All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates "Standard Environmental Colors." The color selected for the Prickly Pear Unit Federal 6-22D-12-15 well is Olive Black, 5WA20-6. All facilities will be painted the designated color at the time of installation.
- 12. All trees salvaged from the construction of the well pad will be clearly segregated from the spoil material, to prevent burying of trees in the spoil material.
- 13. No salvaged trees will be pushed up against live trees or buried in the spoil material.
- 14. All areas not needed for production of the well will be reclaimed within 90 days of completion of the last well if weather conditions are favorable, unless the BLM Authorized Officer gives an extension.
- 15. Reserve pits will be closed as soon as possible, but no later than 90 days from time of drilling/well completion, unless the BLM Authorized Officer gives an extension. Squeezing of pit fluids and cuttings is prohibited. Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade. The operator will be responsible for recontouring any subsidence areas that develop from closing a pit before it is sufficiently dry.

- 16. The operator will drill seed on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used.
- 17. Please contact Don Stephens, Natural Resource Specialist, (435) 636-3608, Bureau of Land Management, Price Field Office, if there are any questions concerning these surface use COAs.
- 18. A Paleontologist acceptable to the BLM will monitor during surface disturbing activities. If paleontologic resources are uncovered during surface disturbing activities, the paleontologist shall immediately notify the Authorized Officer (AO). The AO will arrange for a determination of significance and, if necessary, recommend a recovery or avoidance plan.
- 19. The pipeline(s) shall be buried.
- 20. During the activities of road maintenance, new road construction or the construction of well pads, if any standing live or dead trees are damaged, cut down or knocked over by grading or construction equipment, actions would be taken to remove excessive vegetation from the road or pad edge.
- 21. An impermeable liner shall be used in the containment area of all permanent condensate and water tanks.
- 22. Gas shall be measured on the well pad unless the BLM Authorized Officer authorizes another location.
- 23. If the well has not been spudded by APD Approval date + 2 years the APD will expire and the operator is to cease all operations related to preparing to drill the well.
- 24. The Mexican Spotted Owl Conservation Measures to avoid impacts:
  - a. Employ best available technology on production wells and compression equipment within .5 miles of canyon habitat model.
  - b. Upon discovery of individuals or sightings of this species, halt construction/drilling activities and notify authorized official.
- 25. No construction/drilling activities shall occur during the time of the year November 1 through April 15 for sage-grouse winter habitat.
- 26. Mule deer on critical winter ranges shall be protected by seasonal restrictions on construction from November 1 through May 15 where federal permits are required.
- 27. Elk on high priority and critical winter ranges would be protected by seasonal restrictions on construction from November 1 through May 15.
- 28. Centralize tanks and facilities with old wells. Utilize low profile tanks.
- 29. Leave trees on the edge of the well site.
- 30. The operator shall contact the BLM Authorized Officer Don Stephens @ 435-636-3608 at least 48-hours prior to the filling and reclamation of pits.

#### II Standard Conditions of Approval

#### A. General

1. If any cultural values [sites, artifacts, human remains] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Price Field Manager notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment. The operator is responsible for

informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized BLM officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places:
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- a time-frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction measures.
- 2. The operator shall restrict travel on unimproved roads during periods of inclement weather or spring thaw when the possibility exists for excessive surface resource damage (e.g., rutting in excess of 4-inches, travel outside roadway, etc.).
- 3. The Companies will provide georeferenced spatial data depicting as-built locations of all facilities, wells, roads, pipelines, power lines, and other related facilities to the BLM by November 1 of each year until completion of project construction activities has occurred.
- 4. If any dead or injured threatened, endangered, proposed, or candidate species is located during construction or operation, the BLM Price Field Office (435-636-3600) shall be notified within 24 hours.
- 5. The Company will conduct clearance surveys for threatened, endangered or other special-concern species at the optimum time. This will require coordination with the BLM before November 1 annually to review the potential for disturbance and to agree on inventory parameters.

#### **B.** Construction

- 1. The operator will limit vegetation removal and the degree of surface disturbance wherever possible. Where surface disturbance cannot be avoided, all practicable measures will be utilized to minimize erosion and stabilize disturbed soils.
- 2. Construction and drilling activity will not be conducted using frozen or saturated soil material during periods when watershed damage or excessive rutting is likely to occur.
- 3. Remove all available topsoil from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will also be salvaged for use in reclamation on all other areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Any topsoil stockpiled for one year or longer will be signed and stabilized with annual ryegrass or other suitable cover crop.
- 4. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved without creating additional undue surface disturbance and where it does not impede watershed and drainage flows.

- 5. Construct the backslope no steeper than 1½:1, and construct the foreslope no steeper than 2:1, unless otherwise directed by the BLM Authorized Officer.
- 6. Maintain a minimum 20-foot undisturbed vegetative border between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.
- 7. With the overall objective of minimizing surface disturbance and retaining land stability and productivity, the operator shall utilize equipment that is appropriate to the scope and scale of work being done for roads and well pads (utilize equipment no larger than needed for the job).
- 8. Reserve pits will be adequately fenced during and after drilling operations until pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fencing, in lieu of more stringent requirements by the surface owner, is defined as follows:
  - Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed.
  - Construction standards: Posts shall be firmly set in ground. If wire is used, it must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.
- 9. The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.
- 10. The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a permeability of less than 10<sup>-7</sup> cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.
- 11. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).
- 12. The reserve pit shall have 2 foot of freeboard maintained at all times to prevent overflow of fluids.
- 13. Culverts will be placed on channel bottoms on firm, uniform beds, which have been shaped to accept them, and aligned parallel to the channel to minimize erosion. Backfill will be thoroughly compacted.
- 14. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
- 15. Construction and other project-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.

- 16. Maximum design speed on all operator-constructed and maintained roads will not exceed 25 miles per hour.
- 17. Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Pipelines shall not be run parallel in drainage bottoms. Suspended pipelines shall provide adequate clearance for maximum runoff.
- 18. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
- 19. The pipeline right-of-way will be brush-hogged to prevent unnecessary disturbance. Only those areas where safety, absolute need for construction or other regulations may warrant the use of topsoil removal by blading or scalping.
- 20. During construction, emissions of particulate matter from well pad and road construction would be minimized by application of water or other non-saline dust suppressants with at least 50 percent control efficiency. Dust inhibitors (surfacing materials, non-saline dust suppressants, and water) will be used as necessary on unpaved roads that present a fugitive dust problem. The use of chemical dust suppressants on public surface will require prior approval from the BLM Authorized Officer.
- 21. The operator shall submit a Sundry Notice (Form 3160-5) to BLM for approval prior to construction of any new surface disturbing activities that are not specifically addressed in the approved APD.

#### C. Operations/Maintenance

- 1. If in the process of air drilling the wells there is a need to utilize mud, all circulating fluids will be contained either in an approved pit or in an aboveground containment tank. The pit or containment tank will be large enough to safely contain the capacity of all expected fluids without danger of overflow. Fluid and cuttings will not be squeezed out of the pit, and the pit will be reclaimed in an expedient manner.
- 2. Confine all equipment and vehicles to the access road(s), pad(s), and area(s) specified in the approved APD.
- 3. All waste, other than human waste and drilling fluids, will be contained in a portable trash cage. This waste will be transported to a State approved waste disposal site immediately upon completion of drilling operations. No trash or empty barrels will be placed in the reserve pit or buried on location. All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.
- 4. Rat and mouse holes shall be filled and compacted from the bottom to the top immediately upon release of the drilling rig from the location.
- 5. The operator will be responsible for prevention and control of noxious weeds and weeds of concern on all areas of surface disturbance associated with this project (well locations, roads, water management facilities, etc.) Use of pesticides shall comply with the applicable Federal and State laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of Interior. Prior to the use of pesticides on public land, the holder shall obtain from the BLM authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer to such use.

- 6. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
- 7. The operator and their contractors shall ensure that all use, production, storage, transport and disposal of hazardous and extremely hazardous materials associated with the drilling, completion and production of these wells will be in accordance with all applicable existing or hereafter promulgated federal, state and local government rules, regulations and guidelines. All project-related activities involving hazardous materials will be conducted in a manner to minimize potential environmental impacts. In accordance with OSHA requirements, a file will be maintained onsite containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds and/or substances which are used in the course of construction, drilling, completion and production operations.
- 8. Produced fluids shall be put in test tanks on location during completion work. Produced water will be put in the reserve pit during completion work per Onshore Order #7.
- 9. The only fluids/waste materials which are authorized to go into the reserve pit are RCRA exempt exploration and production wastes. These include:
  - drilling muds & cuttings
  - rigwash
  - excess cement and certain completion & stimulation fluids defined by EPA as exempt

It does not include drilling rig waste, such as:

- spent hydraulic fluids
- used engine oil
- used oil filter
- empty cement, drilling mud, or other product sacks
- empty paint, pipe dope, chemical or other product containers
- excess chemicals or chemical rinsate

Any evidence of non-exempt wastes being put into the reserve pit may result in the BLM Authorized Officer requiring specific testing and closure requirements.

10. If this well is drilled during the fire season (June-October), the operator shall institute all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access route(s) and well location(s), keeping fire fighting equipment readily available when drilling, etc.

#### D. Dry Hole/Reclamation

- 1. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.
- 2. Disturbed lands will be re-contoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.
- 3. Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform and access road on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.
- 4. Distribute the topsoil evenly over the entire location and other disturbed areas. Prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.
- 5. Phased reclamation plans will be submitted to BLM for approval prior to individual POD facility abandonment via a Notice of Intent (NOI) Sundry Notice. Individual facilities, such as well locations, pipelines, discharge points, impoundments, etc. need to be

addressed in these plans as they are no longer needed. Individual items that will need to be addressed in reclamation plans include:

- Pit closure (Close ASAP after suitably dry, but no later than 90 days from time of drilling unless an extension is given by BLM Authorized Officer.) BLM may require closure prior to 90 days in some cases due to land use or environmental concerns.
- Configuration of reshaped topography, drainage systems, and other surface manipulations
- Waste disposal
- Revegetation methods, including specific seed mix (pounds pure live seed/acre) and soil treatments (seedbed preparation, fertilization, mulching, etc.). On private surface, the landowner should be consulted for the specific seed mix.
- Other practices that will be used to reclaim and stabilize all disturbed areas, such as water bars, erosion fabric, hydro-mulching, etc.
- An estimate of the timetables for beginning and completing various reclamation operations relative to weather and local land uses.
- Methods and measures that will be used to control noxious weeds, addressing both ingress and egress to the individual well or POD.
- Decommissioning/removal of all surface facilities
- 6. BLM will not release the performance bond until all disturbed areas associated with the APD/POD have been successfully revegetated (evaluation will be made after the second complete growing season) and has met all other reclamation goals of the surface owner and surface management agency.
- 7. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.
- 8. For performance bond release approval, a Final Abandonment Notice (with a surface owner release letter on split-estate) must be submitted prior to a final abandonment evaluation by BLM.
- 9. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.
- 10. Any mulch utilized for reclamation needs to be certified weed free.
- 11. Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

Slope	Spacing Interval		
(percent)	(feet)		
<u>≤2</u>	200		
2 - 4	100		
4 - 5	75		
≥ 5	50		

### E. Producing Well

- 1. Reclaim those areas not required for production as soon as possible. The fluids and mud must be dry in the reserve pit before re-contouring pit area. The operator will be responsible for re-contouring and reseeding of any subsidence areas that develop from closing a pit before it is completely dry.
- 2. Reduce the backslope to 2:1 and the foreslope to 3:1, unless otherwise directed by the BLM Authorized Officer. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
- 3. Production facilities (including dikes) must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut unless otherwise approved by the BLM Authorized Officer.
- 4. Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-3A and immediately cleaned up in accordance with BLM requirements. This includes clean-up and proper disposition of soils contaminated as a result of such spills/leaks.
- 5. Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.
- 6. Upgrade and maintain access roads and drainage control (e.g., culverts, drainage dips, ditching, crowning, surfacing, etc.) as necessary and as directed by the BLM Authorized Officer to prevent soil erosion and accommodate safe, environmentally-sound access.
- 7. Prior to construction of production facilities not specifically addressed in the APD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
- 8. If not already required prior to constructing and drilling the well location, the operator shall immediately upgrade the entire access road to BLM standards (including topsoiling, crowning, ditching, drainage culverts, surfacing, etc.) to ensure safe, environmentally-sound, year-round access. Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines in D #11.

### Seed Mix A1

# Temporary Disturbance (for berms, topsoil piles, pad margins)

|--|

Yellow Sweetclover	2.0 lbs/acre
Ladak Alfalfa	2.0 lbs/acre
Cicer Milkvetch	1.0 lbs/acre
Palmer Penstemon	0.5 lbs/acre

### **Grasses Lbs**

Crested Wheatgrass	2.0 lbs/acre
Great Basin Wildrye	2.0 lbs/acre
Intermediate Wheatgrass	2.0 lbs/acre

### Total 11.5 lbs/acre

1 Seed mix A is designed for rapid establishment, soil holding ability, and nitrogen fixing capability. C-4 EA, West Tavaputs Plateau Drilling Program

### Seed Mix B

Final Reclamation (for buried pipe lines, abandoned pads, road, etc.)

### Forbes Lbs

Palmer Penstemon	0.5 lbs/acre
Golden Cryptantha	0.25 lbs/acre
Utah Sweetvetch	0.5 lbs/acre
Yellow Sweetclover	2.0 lbs/acre
Lewis Flax	1.0 lbs/acre

### **Grasses Lbs**

1.0 lbs/acre
1.0 lbs/acre
2.0 lbs/acre
0.5 lbs/acre
0.5 lbs/acre
2.0 lbs/acre

### **Woody Plants Lbs**

Fourwing Saltbush	2.0 lbs/acre
Winterfat	0.5 lbs/acre

Wyoming Big Sage brush
Utah Serviceberry
Blue Elderberry (Raw Seeds)
0.25 lbs/acre
1.0 lbs/acre

#### Total 16.0 lbs/acre

1 Yellow Sweetclover is planted as a nurse crop to provide solar protection, soil binding and nitrogen fixing. It will normally be crowded out in 2 to 3 years.

### TMC 1: Browse Hand Planting Tubeling Mixtures

One of the two browse species lists (checked below) are to be hand planted at the prescribed application rate and according to the following prescribed methods on areas that are undergoing long term reclamation. The would include all pipeline corridors, berm around edge of drill pads, miscellaneous disturbed areas associated with construction such as staging areas for equipment, sidecast on road cuts, along side upgraded or new roads up to and including borrow ditch and in the termination of redundant access roads being closed. This planting shall be completed in the first planting window following completion of construction and on all other disturbed areas upon final reclamation.

### **Planting Methods:**

Planting shall be accomplished using a labor force with specific experience in landscape restoration, hand planting methods and handling and care of browse tubling and or bareroot stock plants.

Browse plants to be utilized can be bareroot stock or tubling stock plants of 1 year old age class or greater.

Browse seedling protectors will be used to provide protection from browsing ungulates for two years. Seedling protectors will be of an open mesh rigid design that will break down when exposed to sunlight and that measures a minimum of 12 inches in length and 4 inches in diameter.

Planting shall be completed in the spring (March 1-April 1) and or fall (November 1-December 1) planting windows.

Browse plants shall be stored and handled in such a manner as to maintain viability, according to the type of browse stock being used.

Planting Species and Application Rate: [ ] Sagebrush-Grass [X] Pinyon-Juniper

	Plants Per Acre			
Species	Sagebrush- Grass	Pinyon- Juniper		
Wyoming Sagebrush (Gordon Creek)	100	50		
Fourwing Saltbush (Utah seed source collected at or above 5,000 feet elevation)	100	50		
True Mountain Mahogany (Utah seed source)	0	50		
Antelope Bitterbrush (Utah seed source)	0	50		
TOTAL	200	200		
Suitable Substitutions: Utah Serviceberry	No	50		

Winterfat 100 | No

Table 2.3 Lease Numbers, Oil and Gas Units, Federal ROW Requirements, and Lease Stipulations for State and Federal Wells Proposed by BBC.

Location/Well Number	Federal Lease Number and Stipulations	Unit Name	Federal ROW Needs
Federal Wells		······································	
7-25	UTU-59970	Prickly Pear Unit	Lower Flat Iron Road
16-34	UTU-73671	Prickly Pear Unit	Lower Flat Iron Road
27-3	UTU-73670 1,2,3	Prickly Pear Unit	None
21-2	UTU-73670 1,2,3	Prickly Pear Unit	None
13-4	UTU-74385	Prickly Pear Unit	None
5-13	UTU-73665	Prickly Pear Unit	None
24-12	UTU-77513 1,2,3	Prickly Pear Unit	. None
10-4	UTU-74386 1,2,3,4	Prickly Pear Unit	None
15-19	UTU-66801 1,2,3	Jack Canyon Unit	None
Existing Pads			•
UT-10	UTU-66801 1,2,3	Jack Canyon Unit	None
PPH-8	UTU-66801 1,2,3	Jack Canyon Unit	None
PP-11	UTU-66801 1,2,3	Jack Canyon Unit	None
State Wells			,
Section 2, T13S, R15E	NA	Prickly Pear Unit	Lower Flat Iron Road
ection 36, T12S, R15E	NA	Prickly Pear Unit	Lower Flat Iron Road
Section 32, T12S, R16E	NA	Jack Canyon Unit	Cottonwood Canyon Road
ection 2, T13S, R16E	NA	None	Peters Point Road Extension

No occupancy or other surface disturbance will be allowed within 330 feet of the centerline or within the 100-year recurrence interval floodplain, whichever is greater, of the perennial streams or within 660 feet of springs, whether flowing or not. This distance may be modified when specifically approved in writing by the authorized officer of the BLM.

In order to minimize watershed damage, exploration drilling and other development activity will be allowed only during the period from May 1 to October 31. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically approved in writing by the authorized officer of the BLM.

Construction of access roads and drill pads on slopes in excess of 30 percent will require special design standards to minimize watershed damage. Drilling operations and any associated construction activities on slopes in excess of 50 percent may require directional drilling to prevent damage to the watershed. Exceptions to the limitations may be specifically approved in writing by the authorized officer of the BLM.

Raptor surveys will be required whenever surface disturbance and/or occupancy proposed in association with oil/gas exploration occur within a known nesting complex for raptors located in the NWNW, Sec. 10, T12S, R14E. Field surveys will be conducted by the lessee/operator as determined by the AO of the BLM. When surveys are required of the lessee/operator, the consultant hired must be found acceptable to the AO prior to the field survey being conducted. Based on the result of the field survey, the AO will determine appropriate buffer zones.



### 1.0 INTRODUCTION

Appendix B is part of BBC's Proposed Action for the WTPDP as described in Chapter 2.0, and BBC will comply with the standards, procedures, and requirements contained in Appendix B when implementing the Alternatives unless otherwise provided for by the BLM Authorized Officer (AO). Appendix B describes standard practices utilized to mitigate adverse effects caused by surface-disturbing activities.

#### 2.0 STANDARD PRACTICES

The following BMPs/Applicant-Committed Protection Measures (ACEPM) will be applied to all federal lands within the WTPPA by BBC to minimize impacts to the environment. Exception, modification, or waiver of a mitigation requirement may be granted if a thorough analysis by BLM determines that the resource(s) for which the measure was developed will not be impacted by the project activity. Further site-specific mitigation measures may be identified during the application for permit to drill (APD) and/or right-of-way (ROW) application review processes.

### 2.1 PRECONSTRUCTION PLANNING AND DESIGN MEASURES

- BBC and/or their contractors and subcontractors will conduct all phases of project implementation, including well location, road and pipeline construction, drilling and completion operations, maintenance, reclamation, and abandonment in full compliance with all applicable federal, state, and local laws and regulations and within the guidelines specified in approved APDs and ROW permits.
   BBC will be held fully accountable for their contractor's and subcontractor's compliance with the requirements of the approved permit and/or plan.
- 2. Implementation of site-specific activities/actions will be contingent on BLM determining that the activity/action complies with the following plans:
  - Surface Use Plan and/or Plan of Development; and
  - Site-specific APD plans/reports (e.g., road and wellpad design plans, cultural clearance, special status plant species clearance, etc.).

The above plans may be prepared by the Companies for the project area or submitted incrementally with each APD, ROW application, or Sundry Notice (SN).

### 2.2 ROADS

- 1. BBC will construct roads on private surface in a safe and prudent manner to the specifications of landowners.
- 2. Roads on federal surface will be constructed as described in BLM Manual 9113. Where necessary, running surfaces of the roads will be graveled if the base does not already contain sufficient aggregate.
- 3. Existing roads will be used when the alignment is acceptable for the proposed use. Generally, roads will be required to follow natural contours; provide visual screening by constructing curves, etc.; and be reclaimed to BLM standards.
- 4. To control or reduce sediment from roads, guidance involving proper road placement and buffer strips to stream channels, graveling, proper drainage, seasonal closure, and in some cases, redesign or closure of old roads will be developed when necessary. Construction may also be prohibited during periods when soil material is saturated, frozen, or when watershed damage is likely to occur.
- 5. Available topsoil will be stripped from all road corridors prior to commencement of construction activities and will be redistributed and reseeded on backslope areas of the borrow ditch after completion of road construction activities. Borrow ditches will be reseeded in the first appropriate season after initial disturbance.

- 6. On newly constructed roads and permanent roads, the placement of topsoil, seeding, and stabilization will be required on all cut and fill slopes unless conditions prohibit this (e.g., rock). No unnecessary side-casting of material (e.g., maintenance) on steep slopes will be allowed.
- 7. Reclamation of abandoned roads will include requirements for reshaping, recontouring, resurfacing with topsoil, installation of water bars, and seeding on the contour. Road beds, wellpads, and other compacted areas will be ripped to a depth of 1.0 foot on 1.5 feet centers to reduce compaction prior to spreading the topsoil across the disturbed area. Stripped vegetation will be spread over the disturbance for nutrient recycling, where practical. Fertilization or fencing of these disturbances will not normally be required. Additional erosion control measures (e.g., fiber matting) and road barriers to discourage travel may be required. Graveled roads, wellpads, and other sites will be stripped of usable gravel and hauled to new construction sites prior to ripping as deemed necessary by the AO. The removal of structures such as bridges, culverts, cattleguards, and signs will usually be required.
- 8. Main artery roads, regardless of the primary user, will be crowned, ditched, drained, and, if deemed appropriate by the AO, surfaced with gravel.
- 9. Unnecessary topographic alterations will be mitigated by avoiding, where possible, steep slopes, rugged topography, and perennial and ephemeral/intermittent drainages, and by minimizing the area disturbed.
- 10. Upon completion of construction and/or production activities, the Companies will restore, to the extent practicable, the topography to near pre-existing contours at well sites, access roads, pipelines, and other facility sites.
- 11. Existing roads will be used to the maximum extent possible and upgraded as necessary.
- 12. BBC will comply with existing federal, state, and county requirements and restrictions to protect road networks and the traveling public.
- 13. Special arrangements will be made with the Utah Department of Transportation to transport oversize loads to the project area. Otherwise, load limits will be observed at all times to prevent damage to existing road surfaces.
- 14. All development activities along approved ROWs will be restricted to areas authorized in the approved ROW.
- 15. Roads and pipelines will be located adjacent to existing linear facilities wherever practical.
- 16. BBC and/or their contractors will post appropriate warning signs and require project vehicles to adhere to appropriate speed limits on project-required roads, as deemed necessary by the AO.
- 16. BBC will be responsible for necessary preventative and corrective road maintenance for the duration of the project. Maintenance responsibilities may include, but are not limited to, blading, gravel surfacing, cleaning ditches and drainage facilities, dust abatement, noxious weed control, or other requirements as directed by the AO.

### 2.3 WELLPADS AND FACILITIES

- 1. In conformance with Onshore Oil and Gas Order No. 1, BBC will prepare and submit individual comprehensive drill site design plans for BLM approval. These plans will show the drill location layout over the existing topography; dimensions of the location; volumes and cross sections of cut and fill; location and dimensions of reserve pits; existing drainage patterns; and access road egress and ingress. Plans will be submitted and approved prior to initiation of construction.
- 2. No surface disturbance is recommended on slopes in excess of 25% unless erosion controls can be ensured and adequate revegetation is expected. Engineering proposals and revegetation and restoration plans will be required in these areas.
- 3. Reserve pits will be constructed to ensure protection of surface and ground water. The review to determine the need for installation of lining material will be done on a case-by-case basis and consider soil permeability, water quality, and depth to ground water.
- 4. Reserve pit liners will have a mullen burst strength that is equal to or exceeds 300 pounds, a puncture strength that is equal to or exceeds 160 pounds, and grab tensile strengths that are equal to or exceed 150 pounds. There will be verified test results conducted according to ASTM test standards. The liner will be totally resistant to deterioration by hydrocarbons.
- 5. Produced water from oil and gas operations will be disposed of in accordance with the requirements of Onshore Oil and Gas Order #7.
- 6. Pits will be fenced as specified in individual authorizations. Any pit containing harmful fluids will be maintained in a manner that will prevent migratory bird mortality.
- 7. Disturbances will be managed/reclaimed for zero runoff from the wellpad or other facility until the area is stabilized. All excavations and pits will be closed by backfilling and contouring to conform to surrounding terrain. On wellpads and other facilities, the surface use plan will include objectives for successful reclamation including soil stabilization, plant community composition, and desired vegetation density and diversity.
- 8. On producing wells, BBC will reduce slopes to original contours (not to exceed 3:1 slopes). Areas not used for production purposes will be backfilled and blended into the surrounding terrain, reseeded, and erosion control measures installed. Erosion control measures will be required after slope reduction. Mulching, erosion control measures, and fertilization may be required to achieve acceptable stabilization.
- 9. Abandoned sites will be satisfactorily rehabilitated in accordance with the approved APD.

### 2.4 PIPELINES

- 1. Pipeline construction methods and practices will be completed in such a manner so as to obtain good reclamation and the re-establishment of the native plant community.
- 2. On ditches exceeding 24 inches in width, 6 to 12 inches of surface soil will be salvaged on the entire right-of-way, where practicable. When pipelines are buried, there will be at least 30 inches of backfill on top of the pipe. Backfill will not extend above the original ground level after the fill has settled. Guides for construction and water bar placement found in "Surface Operating Standards for Oil and

Gas Exploration and Development" (BLM and USFS 1989) will be followed. Bladed surface materials will be re-spread upon the cleared route once construction is completed. Disturbed areas that have been reclaimed will be fenced when the route is near livestock watering areas at the discretion of the AO.

- 3. Pipeline ROWs will be located to minimize soil disturbance to the greatest extent practicable. Mitigation will include locating pipeline ROWs adjacent to access roads to minimize ROW disturbance widths, or routing pipeline ROWs directly to minimize disturbance lengths.
- 4. Existing crowned and ditched roads will be used for access where possible to minimize surface disturbances. Clearing of pipeline ROWs will be accomplished with the least degree of disturbance to topsoil. Where topsoil removal is necessary, it will be stockpiled (windrowed) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the ROW will also be re-spread to provide protection, nutrient recycling, and a seed source.
- 5. Temporary disturbances which do not require major excavation (e.g., small pipelines) may be stripped of vegetation to ground level using mechanical treatment, leaving topsoil intact and root masses relatively undisturbed.
- 6. To promote soil stability, backfill over the trench will be compacted so as not to extend above the original ground level after the fill has settled. Wheel or other methods of compacting the pipeline trench backfill will occur at two levels to reduce trench settling and water channeling--once after 3 feet of fill has been replaced and once within 6-12 inches of the surface. Water bars, mulching, and terracing will be installed, as needed, to minimize erosion. Instream protection structures (e.g., drop structures) in drainages crossed by a pipeline will be installed at the discretion of the AO to prevent erosion.
- 7. BBC will adhere to the following procedures regarding the installation of pipelines during periods when the earth is frozen.
  - The BLM Price Field Office will be contacted at least 10 days prior to anticipated start of project.
     The project will not proceed until such time as authorization from BLM has been received by the Companies.
  - A BLM representative will be on the ground at the beginning of construction.
  - Snow, if present, will be removed utilizing a motor grader.
  - Vegetation will be scalped and windrowed to one side of the right-of-way.
  - A wheel trencher will be used to remove approximately 6-8 inches of topsoil from the top of the pipeline ditch and windrow it to one side.
  - A trench approximately 4 feet deep will be dug using a wheel trencher and the soil will be stockpiled to one side, making sure the top soil or spoil do not get mixed together.
  - The pipeline will be installed, the trench backfilled, and the spoil compacted in the trench.
  - Stockpiled topsoil will be placed in the trench and compacted.
  - · Scalped vegetation back will be placed back on right-of-way using a motor grader.
  - The entire right-of-way will be reseeded as normal in the spring after the thaw.

These procedures will be incorporated in every Plan of Development where construction in frozen earth is anticipated.

### 2.5 AIR QUALITY

- 1. BBC will comply with all applicable local, state, and federal air quality laws, statutes, regulations, standards, and implementation plans.
- 2. BBC will obtain all necessary air quality permits from UDAQ to construct, test, and operate facilities.
- 3. All internal combustion equipment will be kept in good working order.
- 4. The Companies will use water at construction sites, as necessary, to abate fugitive dust.
- 5. The Companies will not allow any open burning of garbage or refuse at well sites or other facilities.

### 2.6 VEGETATION

- 1. Removal and disturbance of vegetation will be kept to a minimum through construction site management (e.g., using previously disturbed areas and existing easements, limiting equipment/materials storage yard and staging area size, etc.).
- 2. Wellpads and associated roads and pipelines will be located to avoid or minimize impacts in areas of high value (e.g., sensitive species habitats, wetland/riparian areas).

### 2.7 SOILS

- 1. Surface-disturbing activities will be examined on a site-specific basis, evaluating the potential for soil loss and the compatibility of soil properties with project design. Stipulations and mitigating measures will be developed on a case-by-case basis to ensure soil conservation and practical management.
- 2. BBC will restrict construction activities during periods when soils are saturated and excessive rutting (>4 inches with multiple passes) would occur.
- 3. Salvage and subsequent replacement of topsoil will occur for surface-disturbing activities wherever specified by the AO.
- 4. Before a surface-disturbing activity is undertaken, topsoil depth will be determined and the amount of topsoil to be removed, along with topsoil placement areas, will be specified in the authorization. The uniform distribution of topsoil over the area to be reclaimed will occur unless conditions warrant a varying depth. On large surface-disturbing projects topsoil will be stockpiled and seeded to reduce erosion. Where feasible, topsoil stockpiles will be designed to maximize surface area to reduce impacts to soil microorganisms. Areas used for spoil storage will be stripped of topsoil before spoil placement, and the replacement of topsoil after spoil removal will be required.
- 5. BBC will avoid adverse impacts to soils by:
  - minimizing the area of disturbance;
  - avoiding construction with frozen soil materials to the extent practicable;
  - avoiding areas with high erosion potential (e.g., unstable soil, dunal areas, slopes greater than 25%, floodplains), where practicable;
  - salvaging and selectively handling topsoil from disturbed areas;
  - adequately protecting stockpiled topsoil and replacing it on the surface during reclamation;
  - leaving the soil intact (scalping only) during pipeline construction, where practicable:

- using appropriate erosion and sedimentation control techniques including, but not limited to, diversion terraces, riprap, and matting;
- · promptly revegetating disturbed areas using adapted species;
- applying temporary erosion control measures such as temporary vegetation cover, application of mulch, netting, or soil stabilizers; and/or
- constructing barriers, as appropriate, to minimize wind and water erosion and sedimentation prior to vegetation establishment.
- 6. Appropriate erosion control and revegetation measures will be employed. Grading and landscaping will be used to minimize slopes, and water bars will be installed on disturbed slopes in areas with unstable soils where seeding alone may not adequately control erosion. Erosion control efforts will be monitored by the Companies and necessary modifications made to control erosion.
- 7. Sufficient topsoil or other suitable material to facilitate revegetation will be segregated from subsoils during all construction operations requiring excavation and will be returned to the surface upon completion of operations. Soils compacted during construction will be ripped and tilled as necessary prior to reseeding. Cut and fill sections on all roads and along pipelines will be revegetated with native species.
- 8. Any accidental soil contamination by spills of petroleum products or other hazardous materials will be cleaned up by the Companies and the soil disposed of or rehabilitated according to applicable rules.
- 9. BBC will restrict off-road vehicle (ORV) activity by employees and contract workers to the immediate area of authorized activity or existing roads and trails.

### 2.8 RECLAMATION

- 1. BBC's reclamation goals will emphasize: 1) protection of existing native vegetation; 2) minimal disturbance of the existing environment; 3) soil stabilization through establishment of ground cover; and 4) establishment of native vegetation consistent with land use planning.
- 2. All reclamation will be accomplished as soon as possible after the disturbance occurs with efforts continuing until a satisfactory revegetation cover is established.
- 3. Seed mixtures for reclaimed areas will be site-specific, composed of native species, and will include species promoting soil stability. A pre-disturbance species composition list will be developed if the site includes several different plant communities. Livestock palatability and wildlife habitat needs will be given consideration during seed mix formulation. BLM Manual 1745, Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants, and Executive Order No. 11987, Exotic Organisms, will be used as guidance.
- 4. Interseeding, secondary seeding, or staggered seeding may be used to accomplish revegetation objectives. During rehabilitation of areas in important wildlife habitat, provision will be made for the establishment of native browse and forb species. Follow-up seeding or corrective erosion control measures will occur on areas where initial reclamation efforts are unsuccessful.
- 5. Any mulch used by BBC will be weed free and free from mold, fungi, or noxious weed seeds. Mulch may include native hay, small grain straw, wood fiber, live mulch, cotton, jute, synthetic netting, and

rock. Straw mulch will contain fibers long enough to facilitate crimping and provide the greatest cover.

- 6. BBC will be responsible for the control of all noxious weed infestations on disturbed surfaces. Aerial application of chemicals will be prohibited within 0.25 mile of special status plant locations, and hand application will be prohibited within 500 feet. Herbicide application will be monitored by the AO.
- 7. Recontouring and seedbed preparation will occur immediately prior to reseeding on the unused portion of wellpads, road ROWs, and entire pipeline ROWs outside of road ROWs. In the event of uneconomical wells, BBC will initiate reclamation of the entire wellpads, access road, and adjacent disturbed habitat as soon as possible. BBC assumes the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which results in the proper reclamation of disturbed lands. BBC will monitor reclamation to determine and ensure successful establishment of vegetation. No consent to termination of any bond will be given by the AO until all the terms and conditions of the approved permit(s) have been met.
- 8. Proper erosion and sediment control structures and techniques will be incorporated by the Companies into the design of wellpads, roads, pipelines, and other facilities. Revegetation using a BLM-approved, locally adapted seed mixture containing native grasses, forbs, and shrubs will begin in the first appropriate season following disturbance. Vegetation removed will be replaced with plants of equal forage value and growth form using procedures that include:
  - fall reseeding (September 15 to freeze-up), where feasible;
  - spring reseeding (April 30 May 31) if fall seeding is not feasible;
  - · deep ripping of compacted soils prior to reseeding;
  - surface pitting/roughening prior to reseeding;
  - utilization of native cool season grasses, forbs, and shrubs in the seed mix;
  - interseeding shrubs into an established stand of grasses and forbs at least one year after seeding;
  - appropriate, approved weed control techniques;
  - · broadcast or drill seeding, depending on site conditions; and
  - fencing of certain sensitive reclamation sites (e.g., riparian areas, steep slopes, and areas within 0.5 mile of livestock watering facilities) as determined necessary through monitoring.
- 9. BBC will monitor noxious weed occurrence on the project area and implement a noxious weed control program in cooperation with BLM. Weed-free certification by county extension agents will be required for grain or straw used for mulching revegetated areas.

### 2.9 CANDIDATE PLANTS/SPECIAL STATUS PLANTS

- 1. Herbicide applications will be kept at least 500 feet from known special status plant species populations or other distances deemed safe by the AO.
- 2. Wellpads and associated roads and pipelines will be located to avoid or minimize impacts to areas of high value (e.g., special status plant species habitats, wetland/riparian areas).

### 2.10 WATERSHEDS

1. Crossings of ephemeral, intermittent, and perennial streams associated with road and utility line construction will generally be restricted until normal flows are established after spring runoff.

### 2.11 GEOLOGICAL/PALEONTOLOGICAL RESOURCES

- 1. Wells, pipelines, and ancillary facilities will be designed and constructed such that they will not be damaged by moderate earthquakes. Any facilities defined as critical according to the Uniform Building Code will be constructed in accordance with applicable Uniform Building Code Standards for Seismic Risk Zone 2B.
- 2. If paleontological resources are uncovered during surface-disturbing activities, BBC will suspend operations at the site that will further disturb such materials and immediately contact the AO, who will arrange for a determination of significance, and, if necessary, recommend a recovery or avoidance plan.

### 2.12 CULTURAL/HISTORICAL RESOURCES

- 1. BBC will follow the cultural resources and recovery plan for the project.
- 2. If cultural resources are located within frozen soils or sediments that preclude the possibility of adequately recording or evaluating the find, construction work will cease and the site will be protected for the duration of frozen soil conditions. Recordation, evaluation and recommendations concerning further management will be made to the AO following natural thaw. The AO will consult with the affected parties and construction work will resume once management of the threatened site has been finalized and the Notice to Proceed has been issued.
- 3. BBC will inform their employees, contractors and subcontractors about relevant federal regulations intended to protect archaeological and cultural resources. All personnel will be informed that collecting artifacts, including arrowheads, is a violation of federal law and that employees engaged in this activity may be subject to disciplinary action.

#### 2.13 WATER RESOURCES

- 1. BBC will maintain a complete copy of the SPCC Plan at each facility if the facility is normally attended at least 8 hours per day, or at the nearest field office if the facility is not so attended (40 CFR 112.3(e)).
- 2. BBC will implement and adhere to SPCC Plans in a manner such that any spill or accidental discharge of oil will be remediated. An orientation will be conducted by the Companies to ensure that project personnel are aware of the potential impacts that can result from accidental spills, as well as the appropriate recourse if a spill does occur. Where applicable and/or required by law, streams at pipeline crossings will be protected from contamination by pipeline shutoff valves or other systems capable of minimizing accidental discharge.
- 3. If reserve pit leakage is detected, operations at the site will be curtailed, as directed by the BLM, until the leakage is corrected.
- 4. BBC will case and cement all gas wells to protect subsurface mineral and freshwater zones. Unproductive wells and wells that have completed their intended purpose will be properly abandoned and plugged using procedures identified by BLM (federal mineral estate) and/or WOGCC (state and fee mineral estate).

- 5. All water used in association with this project will be obtained from sources previously approved by the Utah State Engineer's Office.
- 6. Erosion-prone or high salinity areas will be avoided where practicable. Necessary construction in these areas will be timed to avoid periods of greatest runoff.
- 7. BBC will incorporate proper containment of condensate and produced water in tanks and drilling fluids in reserve pits, and will locate staging areas for storage of equipment away from drainages to prevent contaminants from entering surface waters.
- 8. Prudent use of erosion control measures, including diversion terraces, riprap, matting, temporary sediment traps, and water bars will be employed by the Companies as necessary. These erosion control measures will be used as appropriate to control surface runoff generated at wellpads. The type and location of sediment control structures, including construction methods, will be described in APD and ROW plans. If necessary, BBC may treat diverted water in detention ponds prior to release to meet applicable state or federal standards.
- 9. BBC will construct channel crossings by pipelines so that the pipe is buried at least 3 feet below the channel bottom.
- 10. Streams/channels crossed by roads will have culverts installed at all appropriate locations as specified in the BLM Manual 9112-Bridges and Major Culverts and Manual 9113-Roads. Streams will be crossed perpendicular to flow, where possible, and all stream crossing structures will be designed to carry the 25-year discharge event or other capacities as directed by the AO.
- 11. BBC will reshape disturbed channel beds to their approximate original configuration.
- 12. The disposal of all hydrostatic test water will be done in conformance with BLM Onshore Oil and Gas Order No. 7. BBC will comply with state and federal regulations for water discharged into an established drainage channel. The rate of discharge will not exceed the capacity of the channel to convey the increased flow. Waters that do not meet applicable state or federal standards will be evaporated, treated, or disposed of at an approved disposal facility.
- 13. BBC will prepare Storm Water Pollution Prevention Plans (SWPPPs) as required by WDEQ National Pollution Discharge Elimination System (NPDES) permit requirements on individual disturbances that exceed 5 acres in size or as required by future changes in regulations.
- 14. Any disturbances to wetlands and/or waters of the U.S. will be coordinated with the COE, and 404 permits will be secured as necessary prior to disturbance.
- 15. Where disturbance of wetlands, riparian areas, streams, or ephemeral/intermittent stream channels cannot be avoided, COE Section 404 permits will be obtained by BBC as required, and, in addition to applicable above-listed measures, the following measures will be applied where appropriate:
  - wetland areas will be crossed during dry conditions (i.e., late summer, fall, or dry winters);
  - streams, wetlands, and riparian areas disturbed during project construction will be restored to as near re-project conditions as practical and, if impermeable soils contributed to wetland formation, soils will be compacted to reestablish impermeability;
  - · wetland topsoil will be selectively handled;
  - · disturbed areas will be recontoured and BLM-approved species will be used for reclamation; and

 reclamation activities will begin on disturbed wetlands immediately after completion of project activities.

### **2.14 NOISE**

1. All engines required for project activities will be properly muffled and maintained in accordance with state and federal laws.

### 2.15 WILDLIFE, FISHERIES, AND THREATENED AND ENDANGERED (T&E) SPECIES

- To minimize wildlife mortality due to vehicle collisions, BBC will advise project personnel regarding
  appropriate speed limits in the project area. Roads no longer required for operations will be reclaimed
  as soon as possible. Potential increases in poaching will be minimized through employee and
  contractor education regarding wildlife laws. If wildlife law violations are discovered, the offending
  employee will be subject to disciplinary action by BBC.
- 2. BBC will protect (e.g., fence or net) reserve, workover, and production pits potentially hazardous to prohibit wildlife access as directed by BLM.
- 3. BBC will utilize wildlife-proof fencing on reclaimed areas in accordance with standards specified in BLM Handbook 1741-1, *Fencing*, if it is determined that wildlife are interfering with successful reestablishment of vegetation.
- 4. Consultation and coordination with USFWS and UDWR will be conducted for all mitigation activities relating to raptors and T&E species and their habitats, and all permits required for movement, removal, and/or establishment of raptor nests will be obtained.
- 5. BBC will adhere to all survey, mitigation, and monitoring requirements identified in the Biological Assessment prepared for this project.

### 2.16 LIVESTOCK/GRAZING MANAGEMENT

- 1. BBC will reclaim nonessential areas disturbed during construction activities in the first appropriate season after well completion.
- Nonessential areas include portions of the wellpads not needed for production operations, the borrow ditch and outslope portions of new road ROWs, entire pipeline ROWs outside of road ROWs, and all roads and associated disturbed areas at nonproductive wells.
- 3. BBC will repair or replace fences, cattleguards, gates, drift fences, and natural barriers to current BLM standards. Cattleguards will be used instead of gates for livestock control on most road ROWs. Livestock will be protected from pipeline trenches, and livestock access to existing water sources will be maintained.
- 4. BBC will review livestock impacts from roads or disturbance from construction and drilling activities at least annually with livestock permittees and BLM. Appropriate measures will be taken to correct any adverse impacts, should they occur.

#### 2.17 RECREATION

- 1. BBC will instruct employees, contractors, and subcontractors that camp sites on federal lands or at federal recreation sites must not be occupied for more than 14 consecutive days.
- 2. BBC will require that employees, contractors, and subcontractors abide by all state and federal laws and regulations regarding hunting.

### 2.18 VISUAL RESOURCES

- 1. Pipeline ROWs will be located within existing ROWs whenever possible, and aboveground facilities not requiring safety coloration will be painted with appropriate nonreflective standard environmental colors (Carlsbad Canyon or Desert Brown, or other specified standard environmental colors) as determined by the AO. Topographic screening, vegetation manipulation, project scheduling, and traffic control procedures may all be employed, as practicable, to further reduce visual impacts.
- 2. Within VRM Class II areas, BBC will utilize existing topography to screen roads, pipeline corridors, drill rigs, wells, and production facilities from view where practicable. The Companies will paint all aboveground production facilities with appropriate colors (e.g., Carlsbad Canyon or Desert Brown) to blend with adjacent terrain, except for structures that require safety coloration in accordance with OSHA requirements.

### 2.19 HEALTH AND SAFETY/HAZARDOUS MATERIALS

- 1. BBC will utilize BLM-approved portable sanitation facilities at drill sites; place warning signs near hazardous areas and along roadways; place dumpsters at each construction site to collect and store garbage and refuse; ensure that all refuse and garbage is transported to a State-approved sanitary landfill for disposal; and institute a Hazard Communication Program for its employees and require subcontractor programs in accordance with OSHA (29 CFR 1910.1200).
- 2. In accordance with 29 CFR 1910.1200, a Material Safety Data Sheet for every chemical or hazardous material brought on-site will be kept on file BBC's field offices.
- 3. Chemicals and hazardous materials will be inventoried and reported by BBC in accordance with the SARA Title III (40 CFR 335). If quantities exceeding 10,000 pounds or the threshold planning quantity are to be produced or stored, BBC will submit appropriate Section 311 and 312 forms at the required times to the State and County Emergency Management Coordinators and the local fire departments.
- 4. BBC will transport and/or dispose of any hazardous wastes, as defined by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, in accordance with all applicable federal, state, and local regulations.
- 5. BBC commits to the following practices regarding hazardous material containment.
  - All storage tank batteries that contain any oil, glycol, produced water, or other fluid which may constitute a hazard to public health or safety will be surrounded by a secondary means of containment for the entire contents of the largest single tank in use plus freeboard for precipitation, or to contain 110% of the capacity of the largest vessel. The appropriate containment and/or diversionary structures or equipment, including walls and floor, will contain

any oil, glycol or produced water and shall be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not drain, infiltrate, or otherwise escape to ground or surface waters before cleanup is completed.

- Treaters, dehydrators and other production facilities that have the potential to leak or spill oil, glycol, produced water, or other fluid which may constitute a hazard to public health or safety, shall be placed on or within appropriate containment and/or diversionary structure to prevent spilled or leaking fluid from reaching ground or surface waters. The appropriate containment and/or diversionary structure will be sufficiently impervious to oil, glycol, produced water, or other fluid and will be installed so that any spill or leakage will not drain, infiltrate, or otherwise escape to ground or surface waters prior to completion of cleanup.
- Notice of any spill or leakage, as defined in BLM NTL 3A, will be immediately reported to the
  AO by the Companies as well as to such other federal and state officials as required by law. Oral
  notice will be given as soon as possible, but within no more than 24 hours, and those oral notices
  will be confirmed in writing within 72 hours of any such occurrence.

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

	······································				····		-		
***************************************			ENTITY ACTION	FORM					
Operator:	Bill Bar	Operator Account Number: N 2165							
Address:	1099 18	3th Street, Suite 2300							
	city Der	nver		,					
	state C	0	zip 80202		F	hone Nu	mber:	(303) 312-8134	
Weli 1							····		
API Nu	ımber	Well	Name	QQ	Sec	Twp	Rng	County	
430073	31360	Prickly Pear Unit Fed	leral 4-22D-12-15	NENW	22	128	15E	Carbon	
Action	Code	Current Entity Number	New Entity Number	s	pud Da	le		i lity Assignment Effective Date	
A	1B	99999	14794	7	7/22/200	8	7	1/30/08	
Commen	ts: To be	soud by Craig's Roust	about setting conducto	r nine onl	v This	ر الأس المس	not begin	/	
	operal	tions until August 2008	myrs= u	S711	P		MUE	INCUTIAL	
		BHL = NW	NW				UNT	DENTIAL	
Well 2		770							
API Nu	mber	Well	Name	QQ	Sec	Twp	Rng	County	
430073	31358	Prickly Pear Unit Fed	leral 13-15D-12-15	NENW	22	128	15E	Carbon	
Action	Code	Current Entity Number	\$250 \$250 \$250 \$250 \$250 \$250 \$250 \$250				Spud Date Entity Assignment Effective Date		
	B 99999 14794				7/22/200	8	7	/30/08	
Comment	lo be	spud by Craig's Roust ions until August 2008	about setting conductor	pipe onl	y. This。 1レか	well will r	not begin	continuous drilling	
L.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		BHL = Sec				***************************************		IFIDENTIAL	
Well 3									
API Nu	mber	Well	Name	QQ	Sec	Twp	Rng	County	
430073	31361	Prickly Pear Unit Fed	eral 6-22D-12-15	NENW	22	128	15E	Carbon	
Action	Code	Current Entity Number	<b>.</b>	pud Dal	<b>e</b> 1		ity Assignment Hective Date		
A	(B)	99999 14794 712212008 7/30/08					/30/08		
Comment	lo be	spud by Craig's Roust	about setting conductor	pipe onl	y. This	well will r	not begin	continuous drilling	
		BHL = 50		>///V <u>(</u>	ر		MA	CINCUTIAL	
ACTION CODE	=e.	DAC = OC	- N W				UUII	FIDENTIAL.	
		ntity for new well (single	well only)		cey Fall				
B - Add new well to existing entity (group or unit well)			Name (Please Print)  HALLY Fallang			3 at M			
<ul> <li>C - Re-assign well from one existing entity to another existing entity</li> <li>D - Re-assign well from one existing entity to a new entity</li> </ul>			Sign	ature	<u>~</u>	COXXL	77		
	-	n 'comments' section)	•	***************************************	ulatory	Analyst		7/21/2008	
			RECEIVED	Title				Date	

(6/2000)

JUL 2 1 2008

# DIVISION OF OIL, GAS AND MINING

### **SPUDDING INFORMATION**

Name of Cor	npany:	]	BILL BA	RRETT	CORPO	RATION		
Well Name:_			PPU FE	D 6-22D	-12-15			
Api No:	43-007-3	1361			_Lease Ty	/pe: <u>FE</u>	DERAL	
Section 22	_Township_	12S	Range_	15E	County_	CAR	BON	
Drilling Con	tractor <u>C</u>	RAIG'	S ROUS	TABOU	T SERV	_RIG #_	RATHOLE	
SPUDDE	D:							
	Date	07	//22/08					
	Time							
	How	D	RY					
Drilling wi	II Comme	nce:_						
Reported by			JODY S	SOUTH	VIA E-M	AIL		
Telephone #			(208) 6	<u> 695-4817</u>	<b>.</b>			
Date	07/22//08		Signed	1 <u> </u>	HD			



Form 3160-5 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No. UTU-011604 6. If Indian, Allottee or Tribe Name

Do not use this for abandoned well.	orm for proposals to drill or to Use Form 3160-3 (APD) for suc	re-enter an h proposals.	N/A	
SUBMIT	IN TRIPLICATE – Other instructions on		7. If Unit of CA/Agreen Prickly Pear / UTU-79	
1. Type of Well Oil Well 🕢 Gas W	ell Other		8. Well Name and No. Prickly Pear Unit Fed	eral 6-22D-12-15
2. Name of Operator Bill Barrett Corporation			9. API Well No. 43-007-31361	
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or Ex	-
1099 18th Street, Suite 2300 Degver, CO 80202	303-312-8134		Nine Mile/Wasatch-M	
4. Location of Well <i>(Footage, Sec., T.,)</i> NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E	R.,M., or Survey Description)		11. Country or Parish, S Carbon County, UT	tate
12. CHEC	K THE APPROPRIATE BOX(ES) TO INDI	ICATE NATURE OF NOTIO	CE, REPORT OR OTHE	R DATA
TYPE OF SUBMISSION		TYPE OF ACT	TON	
Notice of Intent  ✓ Subsequent Report		ure Treat Recl	amation (Start/Resume) amation	Water Shut-Off  Well Integrity  Other Weekly Activity
Subsequent Report			porarily Abandon	Reports
Final Abandonment Notice	Convert to Injection Plug		er Disposal	
Weekly drilling activity reports from	08/29/2008 through 09/04/2008 (reports	2-8).	RECE	
		RECEIVED	ILOL	
				<b>3 2008</b>
		SEP 08 2008		· 45
•	D	IV. OF OIL, GAS & MINII	NG	
14. I hereby certify that the foregoing is Name (Printed/Typed)	true and correct.	Title Environmental/Re	quiatory Analyst	
Tracey Fallang  Signature Matt Bar	her for Tracey Fallang	Date 09/04/2008		
	THIS SPACE FOR FED	ERAL OR STATE O	FFICE USE	
Approved by		-		Date
that the applicant holds legal or equitable	hed. Approval of this notice does not warrant or e title to those rights in the subject lease which was thereon.	would Office		Date
Title 18 U.S.C. Section 1001 and Title	43 U.S.C. Section 1212, make it a crime for any	person knowingly and willfull	y to make to any departme	in or agency or the officer states any ta

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.





Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 9/4/2008

8 Report #:

Depth At 06:00:

5971.00

Bottom Hole Display API #/License SENW-22-12S-15E-W26M 43-007-31361

7565.00 Estimated Total Depth:

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

42 Days From Spud:

Morning Operations: NU BOP'S

Time To	Description
3:00 PM	DIGING OUT AROUND CASING W/CREW, PICK & SHOVEL. JACK HAMMER ON LOC @ 9:50 AM, CONT DIGGING OUT AROUND CONDUCTOR DEEPENING CELLAR AROUND CSG TO DO SURF CASING REPAIR.
3:30 PM	REPAIR DAMAGAGED SURF CSG, HALLIBURTON ON LOC W/ RBP @2:45 PM, MU RBP & TIH ON 10 STANDS DP, TO 952 FT
4:00 PM	SET RBP @952 FT, REL RBP, TOH RUN / RET TOOL
3:00 AM	ND & PU BOP'S, CONT DEEPING CELLAR TO 13' BELOW GROUND LEVEL, CUT-OFF CONDUCTOR & Surf Csg & IS GOOD PIPE. WELD ON NEW SURF PIPE & NEW WELL HEAD, LET WELD COOL 1 HR, PRESS TEST P.SEAL to 1400# & OK
6:00 AM	NU BOP'S

#### Remarks:

DAYS SINCE LTA: 52 DAYS Safety Meeting Topic:ND BOP's, Tripping RBP, BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST PIPE RAMS, S.MTG NITE Tour= NU BOP's, TESTING BOP, STRIPPING OUT HOLE, PICKING UP KELLEY, -BOP DRILL= 73 SEC WATER DELIVERED: 0 BBLS- TOTAL 2630 BBLS-/ Recv'd 60" DIESEL DIESEL ON LOC: 95"=6342 Gal GAL, - USED: ? GAL-Total used= ?/ 4491 GAL<-> NOTE Recived Diesel Fuel Today, Didn't Hold All Diesel Brought, Filled UP- & They took back Some Diesel- Will Up-date Tomorrow Report.

ACC PR= 2800#, MANIFOLD PRESS= 1300#, ANNULAR PR= 1200#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING MOTOR HRS= 92.0 HR 6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17: Hrs= 00 HRS BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 >-/ 4.5", 11.6#, I-80, LTC, R-3

JTS- >>>>> P.CSG= 186 Total + 2 Short Mkr JTS PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S Note: Notified BLM Rep, Walton Willis, By Cell Phone of Hole in Surf Csg, 9/3/08, Walton Came out & Seen us PM 9/3/08- also Notified Him By Voice Mail his Cell of Plans to Test BOP's @ 2:00 AM,9/4/08-



Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 9/3/2008

Report #: 7

Bottom Hole Display

API #/License

43-007-31361

Depth At 06:00:

5971.00

SENW-22-12S-15E-W26M

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud: 41

Morning Operations : Digging out Cellar, Prep to Repair Hole in SURF CSG & WAITING ON AIR HAMM

Time To

Description

6:30 PM

DRILL F/ 5844 Ft to 5971 Ft, Rotating & Sliding, WORE HOLE IN

SURF CASING 1' FROM BOTTEM OF CELLAR.

3:00 PM

DRILL F/5527 FT TO 5844 FT, ROT & SLIDE

3:30 PM

RIG SERVICE

10:00 PM

PUMP PILL, TOH FOR REP SURF CSG, LD BIT#1 & MOTOR DIGGING OUT CELLAR FOR REPAIR HOLE IN SURFACE

6:00 AM

CASING, & WAITING ON AIR HAMMER & TO ARRIVE ON LOC

DAYS SINCE LTA: 51 DAYS

Safety Meeting Topic: SCRUBBING RIG, GREASING CROWN, BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST PIPE RAMS, S.MTG NITE Tour=TRIPPING OUT HOLE, PICKING UP KELLEY ,- BOP DRILL= 73 SEC WATER DELIVERED: 290 BBLS- TOTAL 2630 BBLS DIESEL ON LOC: 1661 GAL, - USED: 1041 GAL- Total

used= 4491 GAL

ACC PR= 2800#, MANIFOLD PRESS= 1300#, ANNULAR

PR= 1200#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 80.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17:

Hrs= 00 HRS

(Note: Recived 169 Jts, 4.5", 11.6#, I-80, LTC P.CSG + 2

Mkr Jts)

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 >-/ 4.5", 11.6#, I-80, LTC, R-3

JTS->>>>>>>

P.CSG= 18 JTS PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S



Well: Prickly Pear Fed. #6-22D-12-15

**Bottom Hole Display** 

Phase/Area: West Tavaputs

API #/License

43-007-31361

Operations Date: 9/2/2008

Report #: 6

Depth At 06:00:

5527.00

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

SENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Davs From Spud:

Morning Operations: DRILLING W/BIT#1 @5527 FT

Time To

Description

6:00 AM

DRILL F/ 4733 Ft to 5527 Ft, Rotating & Sliding

12:30 PM

DRILL F/ 4448 FT TO 4733 FT, ROT & SLIDE

1:00 PM

RIG SERVICE

Remarks:

DAYS SINCE LTA: 50 DAYS

Safety Meeting Topic: WET WEATHER CONDITIONS, AIR BORN CONTĂMANANTS, , BOP DRILL DAY TOUR= 55 SEC, FUNCTION TEST ANNULAR PREVENTER, S.MTG NITE Tour= Cleaning Rig, Making Connections,- BOP

DRILL= 73 SEC

WATER DELIVERED: 0 BBLS- TOTAL 2340 BBLS DIESEL ON LOC: 2702 GAL, - USED: 913 GAL- Total

used= 3450 GAL

ACC PR= 2800#, MANIFOLD PRESS= 1300#, ANNULAR

PR= 1200#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 80.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17:

Hrs=0

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 >-/ 4.5", 11.6#, I-80, LTC, R-3 JTS->>>>>>

P.CSG= 18 JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S

Well: Prickly Pear Fed. #6-22D-12-15

Bottom Hole Display

SENW-22-12S-15E-W26M

Phase/Area: West Tavaputs

API #/License

43-007-31361

Operations Date: 9/1/2008

Report #:

Depth At 06:00:

4448.00

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations : DRILLING W/ BIT#1 @4448 FT

Time To

Description

6:00 AM

DRILL F/ 3751 Ft to 4448 Ft, Rotating & Sliding DRILL F/ 3149 FT TO 3751 FT, ROT & SLIDE

5:30 PM 6:00 PM

RIG SERVICE

Remarks:

DAYS SINCE LTA: 49 DAYS

Safety Meeting Topic: HOUSEKEEPING, DRIVING HOME, BOP DRILL DAY TOUR= 55 SEC, FUNCTION TEST ANNULAR PREVENTER, S.MTG NITE Tour= FORKLIFT, MOVING DP. RELIEF CREWS- BOP DRILL= 56 SEC WATER DELIVERED: 0 BBLS- TOTAL 2340 BBLS DIESEL ON LOC: 3615 GAL, - USED: 876 GAL- Total used= 2537 GAL

ACC PR= 3000#, MANIFOLD PRESS= 1350#, ANNULAR PR= 850#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING MOTOR HRS= 56.5 HR

5 1/2", 17#, I-100, LTC P.CSG= 5 JTS- 4.5", 11.6#, I-80, LTC, R-3 P.CSG= 18 JTS



Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 8/31/2008

4 Report #:

Bottom Hole Display SENW-22-12S-15E-W26M

API #/License 43-007-31361

Depth At 06:00:

3149.00

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations : DRILLING AHEAD W/ BIT #1 @3149 FT

Remarks:

Time To

Description

3:00 PM

DRILL F/ 1817 FT TO 2355 FT, ROT & SLIDE

6:00 AM

DRILL F/ 2355 ft TO 3149 ft, Rotating & Sliding

3:30 PM

**RIG SERVICE** 

DAYS SINCE LTA: 48 DAYS

Safety Meeting Topic: TIE-OFF, FALL PROTECTION, BOP DRILL DAY TOUR= 55 SEC, FUNCTION TEST ANNULAR PREVENTER, S.MTG NITE Tour= CLEANING & PAINTING, Changing Centrifical Pump Packing WATER DELIVERED: 390 BBLS- TOTAL 2340 BBLS DIESEL ON LOC: 4739 GAL, - USED: 1603 GAL- Total

used= 1661 GAL

ACC PR= 3000#, MANIFOLD PRESS= 1375#, ANNULAR

PR= 1300#

6 1/2" Hunting ADJ, 7/8, 3.3, .16 SN-6404 DRILLING

MOTOR HOURS= 33.0 hr

Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 8/30/2008

Report #:

3

API #/License **Bottom Hole Display** 43-007-31361 SENW-22-12S-15E-W26M

Depth At 06:00:

1817.00

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations: DRILLING W/ BIT #1,NOTE: 9.625" SURF CSG SHOE @1457', SPUD @8:30 PM

Remarks:

Time To

Description

8:00 AM 10:30 AM

PU BIT #1, DRILL MOTOR, MWD TOOLS, ORIENT TOOL FACE

1:30 PM

TIH PU BHA & DRILL PIPE, TAG CMT @1372 FT

2:30 PM

INSTALL ROTATING RUBBER, PU KELLEY, TRY BREAK CIRC,

STRING PLUGGED

**CUT DRILL LINE, 138'** 

3:30 PM

TOH, CHECK BIT, MOTOR & FOUND MWD EMITTER SUB

4:30 PM

PLUGGED W/ DRY MUD, CLEANED-OUT PLUGGED MWD TOOL

MU BHA, ORIENT,KELLEY UP, RUN TEST MOTOR & OK, SET

KELLEY BACK

6:00 PM 8:30 PM TIH BIT #1, INSTALL ROT HEAD RUBBER, KELLEY UP & BREAK CIRC, TAG TOC @ 1372'

DRILL TOP PLUG, CEMENT, FLOAT COLL, CMT & GUIDE SHOE

6:00 AM

@1457 FT, KBM SPUD 8 3/4" HOLE @8:30 PM, 8/29/08, DRILL W/BIT #1 F/ 1457 FT

TO 1817 FT

DAYS SINCE LTA: 47 DAYS Safety Meeting Topic: PINCH POINTS, TONG DANGER.

SNUBLINE WARE, PULLING PIPE FROM V-DOOR, BOP DRILL NITE TOUR = 52 SEC

WATER DELIVERED: 0 BBLS- TOTAL 1950 BBLS

DIESEL ON LOC: 6342 GAL, - USED: 58 GAL

ACC PR= 3000#, MANIFOLD PR= 900#, ANNULAR PR= 800#

6 1/2" Hunting ADJ, 7/8, 3.3, .16 SN-6404 DRILLING MOTOR HOURS= 9.5 hr



Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 8/29/2008

Report #:

2

Bottom Hole Display SENW-22-12S-15E-W26M

API #/License 43-007-31361

Depth At 06:00: Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations: INSTALLING WEAR BUSHING

Remarks:

Description

Time To 6:00 PM

RIG RELEASED FROM THE PRICKLY PEAR UF #14-15D-12-15 WELL @12:00 PM ON 8/28/08. START SKIDDIIN RIG ONTO THIS

WELL @12:00 PM, SKID RIG W/ TRUCKS

9:00 PM

**RURT W/ CREWS** 

12:00 AM

NU BOP'S

5:30 AM

PRESSURE TEST BOPE W/ SINGLE JACK TESTER, MARK ABOTT: P.T. BLIND RAMS, PIPE RAMS, CHOKE LINE, KILL LINE, UPPER KELLEY, LOWER KELLEY, SAFETY VALVES, CHOKE MANIFOLD 5 MIN LOW PRESS @250# & 10 MIN HI-PRESS @3000#, P.T. ANNULAR BOP 250# LO- FOR 5 MIN & 1500# HI-FOR 10 MIN, CHOKES @1500#, TEST CASING @1500# & HELD FOR 30 MIN, TESTED KOOMEYNITROGEN, AIR & ELECTRIC, ACC PRESS @3000#, MANIFOLD PRESS @1500#, ANNULAR PRESS @1200#, REMAINING 1800#, NITROGEN BOTTLES 950#, PUMP ANULAR SHUT 1 MIN 30 SEC. RD TESTER

6:00 AM

HOOK-UP FLARE LINE TO PIT & INSTALL WEAR BUSHING

DAYS SINCE LTA: 46 DAYS

Safety Meeting Topic: RIGGING DOWN, SKIDDING W/

TRUCKS, RIGGING UP, NU BOP'S, WATER DELIVERED: 1950 BBLS- TOTAL 1950 BBLS

DIESEL ON LOC: 6400 GAL, - USED: GAL

Form 3160-5 (August 2007)

### tfallang CONFIDENTIAL

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS** 

5. Lease Serial No. UTU-011604	
6. If Indian, Allottee or Tribe Na	ame

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.				N/A		
SUBMI	T IN TRIPLICATE – Other I	instructions on page 2.		A/Agreement, Name and/or No.		
1. Type of Well			8. Well Name	Prickly Pear / UTU-79487  8. Well Name and No. Prickly Pear Unit Federal 6-22D-12-15		
Name of Operator     Bill Barrett Corporation			9. API Well No. 43-007-3136	9. API Well No. 43-007-31361		
3a. Address		3b. Phone No. (include area	code) 10. Field and F	Pool or Exploratory Area		
1099 18th Street, Suite 2300 Denver, CO 80202		303-312-8134		asatch-Mesaverde		
4. Location of Well (Footage, Sec., T.,, NENW, 716 FNL, 2279 FWL Sec. 22, T12S-R15E	R.,M., or Survey Description)		11. Country or Carbon Cour			
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATU	RE OF NOTICE, REPORT O	R OTHER DATA		
TYPE OF SUBMISSION		]	TYPE OF ACTION			
Notice of Intent  ✓ Subsequent Report	Acidize Alter Casing Casing Repair Change Plans	Deepen Fracture Treat New Construction Plug and Abandon	Production (Start/Res Reclamation Recomplete Temporarily Abandon	Well Integrity Other Weekly Activity		
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal	Corrected Dates		
Weekly drilling activity reports from			,			
	~			RECEIVED		
				SEP 1 6 2008		
				DIV. OF OIL, GAS & MINING		
14. I hereby certify that the foregoing is Name ( <i>Printed/Typed</i> )  Tracey Fallang	true and correct.	Title Enviro	onmental/Regulatory Analys			
Signature Hally	Fallane	Date 09/15	/2008			
0	THIS PACE	FOR FEDERAL OR	STATE OFFICE USE			
Approved by		Title		Date		
Conditions of approval, if any, are attache that the applicant holds legal or equitable entitle the applicant to conduct operations	title to those rights in the subject	not warrant or certify		12.00		
Title 18 U.S.C. Section 1001 and Title 43 fictitious or fraudulent statements or repr			y and willfully to make to any d	epartment or agency of the United States any false		



Well: Prickly Pear Fed. #6-22D-12-15

Bottom Hole Display

Phase/Area: West Tavaputs

API #/License

Operations Date: 9/9/2008

Report #: 13

Depth At 06:00:

7518.00

SENW-22-12S-15E-W26M 43-007-31361

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Soud Date: 7/24/2008

Days From Spud:

Morning Operations: PICKING UP B.H.A.

Remarks:

Time To

Description

8:30 AM

CIRC TO CLEAN HOLE / R/U HALLIBURTON

12:00 PM

HOLD SAFTEY MEETING WITH HALLIBURTON / TEST ALL LINES / PUMP 1740 SKS OF 50/50 POZ PREMIUM @ 1.49 YEILD / 13.4

PPG / 7.06 GAL-SK. BUMPED PLUG @ 10:41. GOOD LIFT PRESSURE & RETURNES THROUGHOUT JOB. FLOATS HELD.

2:00 PM

N/D B.O.P.'S & SET SLIPS WITH 40K OVER / CLEAN PITS.

RELEASE RIG @ 14:00.

DAYS SINCE LTA: 57 DAYS

Safety Meeting Topic:Fork Lift Operation, Kelley Down BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST Annular, S.MTG NITE Tour= Proper PPE, BOP DRILL= 83 SEC WATER DELIVERED: 680 BBLS- TOTAL 3610 BBLS

Diesel on Loc: 66"=3117 Gal-/ Day Used=: 750 Gal-/ Total used= 7394 gal

ACC PR= 3000#, MANIFOLD PRESS= 1000#, ANNULAR

PR= 500#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING MOTOR HRS= 92.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17: Hrs= 24 HRS

6.5", Hunting Drlg MotorW/ Bit #3,

SN-6413 /Adj.-4-4-7/8-.16: Hrs= 18.0

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 JTS->>>>>> >-/ 4.5", 11.6#, I-80, LTC, R-3 P.CSG=

186 Total + 2 Short Mkr JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S

Well: Prickly Pear Fed. #6-22D-12-15

SENW-22-12S-15E-W26M

Bottom Hole Display

Phase/Area: West Tavaputs

API #/License

Operations Date: 9/8/2008

Report #:

Depth At 06:00: 7518.00

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations: RIG UP HALLIBURTON.

Remarks:

Description

43-007-31361

Time To 11:00 AM

R/U LOGGERS / RUN LOGS / LOGGERS TD - 7507'

2:00 PM 4:30 PM

PUMP SWEEP / CIRC BTMS UP

9:00 PM

TRIP OUT SIDEWAYS

9:30 PM

**PULL WEAR RING** 

5:00 AM

R/U AND RUN 179 JTS OF 4.5" / 11.6# / I-80 / LTC PRODUCTION

CASING

6:00 AM

CIRC, WHILE WAITING ON HALLIBURTON. NOTIFIED TO BE ON

LOCATION @ 05:00.

DAYS SINCE LTA: 57 DAYS

Safety Meeting Topic:Fork Lift Operation, Kelley Down BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST Annular,-S.MTG NITE Tour= Proper PPE, BOP DRILL= 83 SEC WATER DELIVERED: 680 BBLS- TOTAL 3610 BBLS

Diesel on Loc: 66"=3117 Gal-/ Day Used=: 750 Gal-/ Total used= 7394 gal

ACC PR= 3000#, MANIFOLD PRESS= 1000#, ANNULAR PR= 500#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 92.0 HR 6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17:

Hrs= 24 HRS 6.5", Hunting Drlg MotorW/ Bit #3, SN-6413 /Adj.-4-4-7/8-.16: Hrs= 18.0

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 JTS->>>>>>> >-/ 4.5", 11.6#, I-80, LTC, R-3 P.CSG= 186 Total + 2 Short Mkr JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH, X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S



Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 9/7/2008

Report #:

7518.00

11

Bottom Hole Display SENW-22-12S-15E-W26M

API #/License 43-007-31361

Depth At 06:00: Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations: OUT OF HOLE W/ BIT #3, RU HALLIBURTON LOGGERS FOR OH LOGGS

Remarks:

Time To

Description

3:30 PM

DRILL F/ 6920 FT TO 7206 FT, ROTATING

4:00 PM

RIG SERVICE

11:00 PM

DRILL F/ 7206 Ft to TD @ 7518 Ft

12:00 AM

CIRC SWEEP AROUND @TD

1:00 AM

10 Stand Short Trip

2:00 AM

CIRC & COND, SLUG PIPE

5:00 AM

TOH, SLM DP, FOR LOG OH

6:00 AM

LOGGERS ON LOC @5:30 AM, RU HALLIBURTON LOGGERS

DAYS SINCE LTA: 56 DAYS

Safety Meeting Topic:Fork Lift Operation, Kelley Down BOP DRILL DAY TOUR = 78 SEC, FUNCTION TEST Annular, S.MTG NITE Tour= Proper PPE, BOP DRILL= 83 SEC WATER DELIVERED: 680 BBLS- TOTAL 3610 BBLS Diesel on Loc: 66"=3449 Gal-/ Day Used=: 1116 Gal-/ Total

used= 7394 gal

ACC PR= 3000#, MANIFOLD PRESS= 1000#, ANNULAR

PR= 500#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 92.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17:

6.5", Hunting Drlg MotorW/ Bit #3, Hrs= 24 HRS

SN-6413 /Adi.-4-4-7/8-.16: Hrs= 18.0

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 JTS- >>>>>> >-/ 4.5", 11.6#, I-80, LTC, R-3 P.CSG=

186 Total + 2 Short Mkr JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S

Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 9/6/2008

Report #: 10

API #/License Bottom Hole Display Depth At 06:00: 43-007-31361

Estimated Total Depth:

6920.00 7565.00

Surface Location: NENW-22-12S-15E-W26M

SENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

Morning Operations : DRILLING AHEAD WITH BIT #3 @6920 FT

Time To

Description

12:00 PM 12:30 PM

DRILL F/ 6412 FT TO 6666 FT

**RIG SERVICE & ADJUST BRAKES** 

8:30 PM

DRILL FROM 6666 FT TO 6878 FT

11:00 PM

PUMP SLUG, TOH- Function Test Blind RAMS

12:30 AM

LD Directional Tools, chg out Bit #2 & Motor

2:00 AM

TIH BIT #3 & NEW DRLG MOTOR to 2800' REAM OUT BRIDGE @2800' to 2900 Ft

2:30 AM 4:00 AM

CONT TIH to 6827 Ft

4:30 AM

Precautionary Wash & Ream 6827'-btm -6878'

6:00 AM

DRILL BIT #3 From 6878 Ft To 6920 Ft

# Remarks:

DAYS SINCE LTA: 54 DAYS

Safety Meeting Topic: Adjusting Brakes, Proper Lifting, BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST Annular, S.MTG NITE Tour= TRIPPING, FORK LIFT SAFETY, BOP

DRILL= 83 SEC

WATER DELIVERED: 0 BBLS- TOTAL 2930 BBLS

Diesel on Loc: 66"=4565 Gal-/ Day Used=: 840 Gal-/ Total used= 6278 gal

ACC PR= 3000#, MANIFOLD PRESS= 1000#, ANNULAR PR= 500#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 92.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17: 6.5", Hunting Drlg MotorW/ Bit #3, Hrs= 24 HRS

SN-6216 /Adj.-4-4-7/8-.16: Hrs= 1.5

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 JTS->>>>>>> >-/ 4.5", 11.6#, I-80, LTC, R-3 P.CSG= 186 Total + 2 Short Mkr JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH, X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S

September 12, 2008 Page 2



Well: Prickly Pear Fed. #6-22D-12-15

Phase/Area: West Tavaputs

Operations Date: 9/5/2008

Report #:

Depth At 06:00:

6412.00

Bottom Hole Display SENW-22-12S-15E-W26M

API #/License 43-007-31361

Estimated Total Depth:

7565.00

Surface Location: NENW-22-12S-15E-W26M

Spud Date: 7/24/2008

Days From Spud:

43

Morning Operations: DRILLING AHEAD WITH BIT #2

	-
lime	10
1111110	10

#### Description

### 12:30 PM

WAIT ON SINGLE JACK TESTER, SET TEST PLUG IN WH. PRESS TEST PIPE RAMS, BLIND RAMS, CHOKE LINE, to 250# LOW Press Held 5 MIN & 3000# held Pr for 10 min & OK, Pr Test Annular 5min @ 250# & 10 Min @ 1500# & OK, Pull Test Plug & Test

Casing Against RBP set @952' & Held 30 Min & OK

1:30 PM

TIH RBP Retriving Tool Rel RBP, TOH LD RBP

2:00 PM 3:00 PM

Chg-Out Drill Motor & 7 7/8" Bit #2 & MWD Tools, Orient Tool Face

3:30 PM

CEMENT SURF CSG & BTM OF Cellar w/ CRAIG'S Rostabout

Ready Mix Truck

8:00 PM

TIH BIT #2. Set down on Bridge @3792', Break Circ, Wash &

Ream-out Bridge to 3869', Cont TIH to 5901 Ft, Wash & Ream 5101

FT to Bottem @5971 FT

Install New Wear Bushing in WH

6:00 AM

CONTINUE DRILLING W/ 7 7/8" BIT #2 FROM 5971 Ft to 6412 Ft

#### Remarks:

DAYS SINCE LTA: 53 DAYS

Safety Meeting Topic:Tripping,PU KELLEY, BOP DRILL DAY TOUR= 78 SEC, FUNCTION TEST Annular, Pipe & Blind Rams, S.MTG NITE Tour= TRIPPING, KELLEY UP,

**BOP DRILL= 83 SEC** 

WATER DELIVERED: 160 BBLS- TOTAL 2930 BBLS

Diesel on Loc: 77"=5395 Gal-/ Day Used=: 947 Gal-/ Total used= 5438 gal

ACC PR= 3100#, MANIFOLD PRESS= 1200#, ANNULAR

PR= 750#

6 1/2" Hunting ADJ, 7/8, 4/4, .17 SN-6404 DRILLING

MOTOR HRS= 92.0 HR

6.5", HUNTING DRLG MOTOR, SN-6076 /ADJ-4.4/7/8/.17:

Hrs= 10 HRS

BBC CASING ON LOC: 5 1/2", 17#, I-100, LTC P.CSG= 5 JTS->>>>>>> >-/ 4.5", 11.6#, I-80, LTC, R-3 P.CSG=

186 Total + 2 Short Mkr JTS

PATT DP- 4.5" 16.6#, XH, "G"= 254 Jts <-> 4.5",16.6#, XH,

X= 51 Jts

RIG DC'S-- 24 X 6.5", XH <-> 3 X 8.0" DC'S

Note: Notified BLM Rep, Walton Willis, By Cell Phone of Hole in Surf Csg Repaired & Press Test Completed 9/4/08

@ & TIH to Retrieve RBP After Pr Test

### Form 3160-5 (August 2007)

(Instructions on page 2)

# tfallang CONFIDENTIAL

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# SUNDRY NOTICES AND REPORTS ON WELLS

OM	RM APPROVED IB No. 1004-0137 <del>iros: July 3</del> 1, 2010
5. Lyace Serial Vo. UTW 011604 6. If Indian, Allorres or N/A	Tibe Name

	form for proposals Use Form 3160-3 (A				N/A	<del>-</del>
	T IN TRIPLICATE - Othe	r instructions o	on page 2.		7. If Unit of CA/Ag Prickly Pear / UT	greement, Name and/or No. U-79487
1. Type of Well  Oil Well  Gas W	Vell Other				8. Well Name and I Prickly Pear Unit	No. Federal 6-22D-12-15
Name of Operator     Bill Barrett Corporation	****				9. API Well No. 43-007-31361	
3a. Address 1099 18th Street, Suite 2300		3b. Phone No	. (înclude area d	code)	10. Field and Pool	or Exploratory Area
Denver, CO 80202		303-312-813	34		Nine Mile/Wasato	
4. Location of Well (Footage, Sec., T., NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E	R.,M., or Survey Description	1)			11. Country or Pari Carbon County, U	•
12. CHEC	CK THE APPROPRIATE BO	OX(ES) TO INI	DICATE NATU	RE OF NOTI	CE, REPORT OR OT	THER DATA
TYPE OF SUBMISSION			Т	YPE OF AC	TION	
Notice of Intent	Acidize Alter Casing	Deep Frac	pen ture Treat	_	luction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair	=	Construction	=	omplete	Other
Final Abandonment Notice	Change Plans Convert to Injection		and Abandon Back		porarily Abandon er Disposal	
the proposal is to deepen direction. Attach the Bond under which the v following completion of the involv testing has been completed. Final determined that the site is ready for This sundry is being as notification of September 2, 2008. The casing reprocedure:  1) TOOH and LD DIR tools, Bit, MM 2) TIH w/ 9-5/8" Bridge Plug 3) Set Bridge Plug 4) TOOH w/ Bridge Plug Retrieving 5) Nipple down BOP 6) Jack Hammer out of bottom of complete to the process of the service of	ally or recomplete horizontal work will be performed or pred operations. If the operati Abandonment Notices must refinal inspection.)  of a surface casing repair pair procedure to be follow.  Head  ellar to find casing w/ goods be level	lly, give subsuri ovide the Bond ion results in a r be filed only aff that was comp ed is noted be	Pace locations and No. on file with multiple complet the file all requirements of the second	d measured a BLM/BIA. I ion or recompants, including well. A verbalest BOP I'll w/ Retrie TOOH w/ Bri Pick up Bit, I'll W/ Bit, Mondition mu	nd true vertical depth Required subsequent of the second o	ton Willis was provided on
Name (Printed/Typed) Tracey Fallang			Title Environ	mental/Reg	ulatory Analyst	
Signature Massar	Fallones		Date 09/03/2	008		
	THIS SPACE	FOR FEDE				
Approved by		. ५ ४ -	Acce	pted by Division	the n of	Federal Approval Of This Action is Necessary
Conditions of approval, if any, are attached that the applicant holds legal or equitable ti entitle the applicant to conduct operations to	tle to those rights in the subjec		ertify OileG	as and h	8	Action Is Neccessary
Title 18 U.S.C. Section 1001 and Title 43 in fictitious or fraudulent statements or representations.					o make o and departme	ent or agency of the United States any false,
(Instructions on page 2)		-	31.	- V		

### tfallang CONFIDENTIAL

Form 3160-5 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. UTU-011604

6. If Indian, Allottee or Tribe Name

### **SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to abandoned well. Use Form 3160-3 (APD) for such		N/A		
SUBMIT IN TRIPLICATE – Other instructions of . Type of Well	n page 2.	7. If Unit of CA/Agre Prickly Pear / UTU-	ement, Name and/or No.	
Oil Well Gas Well Other		8. Well Name and No Prickly Pear Unit Fe		
. Name of Operator Bill Barrett Corporation		9. API Well No. 43-007-31361		
The state of the s	(include area code) 4	10. Field and Pool or Nine Mile/Wasatch	• •	
. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) IENW, 716' FNL, 2279' FWL IEC. 22, T12S-R15E		11. Country or Parish Carbon County, UT	•	
12. CHECK THE APPROPRIATE BOX(ES) TO IND	ICATE NATURE OF NOTIC	E, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION	TYPE OF ACT	ION		_
✓ Subsequent Report	rure Treat Recla	action (Start/Resume) mation mplete	Water Shut-Off  Well Integrity  Other  Weekly Activity  Reports	
		orarily Abandon r Disposal	roporto	—
the proposal is to deepen directionally or recomplete horizontally, give subsurfact Attach the Bond under which the work will be performed or provide the Bond of following completion of the involved operations. If the operation results in a notesting has been completed. Final Abandonment Notices must be filed only afted determined that the site is ready for final inspection.)  No activity.  **STATE ONLY**    A. I hereby certify that the foregoing is true and correct.	No. on file with BLM/BIA. Reputible completion or recomp	equired subsequent re letion in a new interva	ports must be filed within 30 days l, a Form 3160-4 must be filed once	
Name (Printed/Typed) Tracey Fallang	Title Regulatory Analyst			
Signature Maria Fallana na	Date 11/21/2008	· · · · · · · · · · · · · · · · · · ·	·	
THIS SPACE FOR FEDE	RAL OR STATE OF	FICE USE		
Approved by				
	Title		Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or othat the applicant holds legal or equitable title to those rights in the subject lease which was the applicant to conduct operations thereon.	ould Office			

(Instructions on page 2)

NOV 2 5 2008

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction **RECEIVED** 

# MENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

tfallang CONFIDENTIAL

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

E. I	C I	AY-
5. Lease	ъегіаі	INO.
UTU-01	1601	
010-01	1004	

Do not use this f	OTICES AND REPO form for proposals t Use Form 3160-3 (A	ORTS ON WELLS to drill or to re-enter a APD) for such proposa	n als.	6. If Indian, Allottee of N/A	r Tribe Name	
	T IN TRIPLICATE – Other	instructions on page 2.		7. If Unit of CA/Agree Prickly Pear / UTU-7	ment, Name and/or No.	
1. Type of Well Oil Well Gas W	Vell Other			8. Well Name and No.		
2. Name of Operator Bill Barrett Corporation				Prickly Pear Unit Fed 9. API Well No. 43-007-31361	deral 6-22D-12-15	
3a. Address		3b. Phone No. (include area co	ode)	43-007-31361 10. Field and Pool or E	Exploratory Area	
1099 18th Street, Suite 2300 Denver, CO 80202		303-312-8134	,	Nine Mile/Wasatch-N	**	
4. Location of Well (Footage, Sec., T.,1 NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E	R.,M., or Survey Description	)		11. Country or Parish, Carbon County, UT	State	
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTIC	E, REPORT OR OTHE	ER DATA	
TYPE OF SUBMISSION		T	YPE OF ACT	ION		
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Recla	action (Start/Resume) mation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	二	mplete orarily Abandon	Other	
Final Abandonment Notice	Convert to Injection	Plug Back		r Disposal		_
testing has been completed. Final A determined that the site is ready for This sundry is being as notification to	final inspection.)		nts, including	reclamation, have been	completed and the operator has	
<ol> <li>I hereby certify that the foregoing is tr Name (Printed/Typed)</li> </ol>	ue and correct.					
Tracey Fallang		Title Regulat	tory Analyst			
Signature Malus	fallang	Date 12/02/2	008			
0	THIS SEACE	FOR FEDERAL OR ST	ATE OFF	ICE USE		
Approved by		Title		D	ate	
Conditions of approval, if any, are attached hat the applicant holds legal or equitable tientitle the applicant to conduct operations to	tle to those rights in the subject hereon.	of lease which would Office			The state of the s	
Title 18 U.S.C. Section 1001 and Title 43 I	ISC Section 1212 make it a	crime for any person knowingly	and willfully to	make to any department	of mency of the wind States one for	Jea

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Title

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false,

Office

Approved by

(Instructions on page 2)

entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DEC 0 8 2008

# **REGULATORY COMPLETION SUMMARY**

WELLCORE

Well Name: Prickly Pear Fed, #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 11/26/2008

Report #:

2

AFE #: 14748D

Summary: SI. Weatherford pressure test Frac tree

and casing to 7700 psi. MIRU Black

warrior and HES Frac .SDFN

**End Time** 

10:00 AM

11:00 AM

Weatherford Pressure test frac tree and casing to 7700 psi. held for

Description

5 mins. no recording.

4:00 PM:

7:00 PM

Rig Black Warrior & HES frac , Opsco

7:00 PM

SI

WELLCORE

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 11/27/2008

Report #:

AFE #: 14748D

Summary: SI. Black Warrior EL stage 1. HES Frac

#1. El stage 2, Frac #2. El stage 3, Frac

#3. EL stage 4. Frac #4. SI.

**End Time** 

1:30 PM

Description

HES frac stage 3 Price River 70Q foam frac. Load & Break @ 6,759 PSI @ 14.7 BPM. Avg. Wellhead Rate:34 BPM. Avg. Slurry Rate:14.4 BPM. Avg. CO2 Rate:18.2 BPM. Avg. Pressure: 5,322 PSI. Max. Wellhead Rate:37.8 BPM. Max. Slurry Rate: 24.7 BPM. Max. Co2 Rate:22.6 BPM. Max. Pressure:6,759 PSI. Total Fluid Pumped: 19,315 gal. Total Sand in Formation:84,000 lb. (20/40 White Sand) Linde CO2 Downhole: 126 tons. CO2 COoldown: 8 Tons. ISIP:3,210 PSI. Frac Gradient:0.90 psi/ft. Dropped qty: 3 perf balls in pad and 3 balls in 2# sand stage. Successfully flushed wellbore with 50Q foam 50 bbl over flush with 500 gal. fluid cap.

3:00 PM

BWWC El stage 4 Lower Dark Canyon. PU HES CFP with 11 ft. perf guns. RIH correlate to short jt. run to setting depthj set CFP @ FT. PU pressure up 500 psi over shut in. Perforate @ 6934-6938. 6924-6927 & 6900-6904, 3 JSPF, 120 phasing, 19 gram charges,

.390 holes. POOH turn well over to frac.

4:00 PM

HES frac stage 4 Lower Dark Canyon 70Q foam frac. Load & break @7,255 PSI @14.5 BPM. Avg. Wellhead Rate: 38.1 BPM. Avg. Slurry Rate:15.3 BPM. Avg. CO2 Rate:21.3 BPM. Avg. Pressure:6632 PSI. Max. Wellhead Rate:39.4 BPM. Max. Slurry Rate: 16.9 BPM. Max. CO2 Rate: 25.5 BPM. Max. Pressure:7,255 PSI. Total Fluid Pumped:21,908 Gal. Total Sand in Formation:104,100 lb. (20/40 White Sand) Linde CO2 Downhole:166 tons. CO2 Cooldown: 9tons. ISIP:4,010PSI. Frac

Gradient:1.02 psi/ft. Successfully flushed wellbore with 50Q foam

50 bbl over flush with 500 gal. fluid cap.

11:59 PM

Si



Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 11/29/2008

Report #:

AFE #: 14748D

Summary: Shut in

**End Time** 

Description

11:59 PM

SI

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 11/27/2008

Report #:

3

AFE # : 14748D

Summary: SI. Black Warrior EL stage 1. HES Frac

#1. El stage 2, Frac #2. El stage 3, Frac

#3. EL stage 4. Frac #4. SI.

**End Time** 

6:00 AM SI

7:30 AM

Black Warrior EL stage 1 Price River. PU 15 ft. Perf guns. RIH correlate to short it. run to perf depth check depth to casing collar. Perforate @ 7347-7362, 3 JSPF, 120 phasing, 19 gram charges.

Description

.390 holes. POOH turn well over to frac.

8:30 AM

HES frac stage 1 Price River 70Q foam frac. Load & Break @ 6159 PSI @ 4.8 BPM. Avg. Wellhead Rate: 29.1 BPM. Avg. Slurry Rate: 12.8 BPM. Avg. CO2 Rate: 14.8 BPM. Avg. Pressure: 4,600 PSI. Max. Wellhead Rate: 34.4 bpm. Max. Slurry Rate: 21.2 BPM. Max. CO2 Rate: 24.7 BPM. Max. Pressure: 5,198 PSI. Total Fluid Pumped: 16,091 PSI. Total Sand in Formation: 64,000 lb. (20/40 White Sand) Praxair CO2 Downhole: 95 tons. CO2 Cooldown: 8 tons. ISIP:3,500 PSI. Frac Gradient: 0.92 psi/ft. Successfully flushed wellbore with 50 Q foam 50 bbl over flush with 500 gal. fluid

10:00 AM

BWWC EL stage 2 Price River. PU HES CFP with 1/8 ft. perf guns. RIH correlate to shortjt. run to setting depth set CFP @ 7170 ft. PU pressure up 500 psi over shut in. Perforate @ 7096-7114, 3 JSPF, 120 phasing, 19 gram charges, .390 holes. POOH turn well over to

frac.

11:00 AM

HES Frac stage 2 Price River 70Q foam Frac. Load & Break @ 3,686 PSI @ 18.3 BPM. Avg. Wellhead Rate: 24.1 BPM. Avg. Slurry Rate: 10.8 BPM. Avg. CO2 Rate: 12.2 BPM. Avg. Pressure: 3,711 PSI. Max. Wellhead Rate: 28.2 BPM. Max. Slurry Rate: 17.7 BPM. Max. CO2 Rate: 19.9 BPM. Max. Pressure: 4,161 PSI. Total Fluid Pumped: 13,744 Gal. Total Sand in Formation: 48,100 lb. (20/40 White Sand) Praxair Co2 Downhole: 72 tons. CO2 Cooldown: 7 tons. ISIP:3,320 PSI. Frac Gradient: 0.91 psi/ft. Successfully flushed wellbore with 50Q foam 50 bbl over flush with 500 gal. fluid

12:30 PM

BWWC El stage 3 Price River. PU HES CFP with 10 ft. perf guns. RIH correlate to short jt. run to setting depth set CFP @ 7050 ft. PU pressure up 500 psi over shut in. Perforate @ 7010-7015 & 6972-6977, 3 JSPF, 120 phasing, 19 gram charges, .390 holes.

POOH turn well over to frac.



Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 12/1/2008

Report #:

AFE #: 14748D

Summary: SICP: 1700, BWWC EL stage 5, frac #5.

EL stage 6. Frac #6. El stage 7. Frac #7. El stage 8.. Frac #8. El stage 9. Frac #9. SI. Rig off well head. Flow back stages

1-9 through Opsco equipment. ( Pure CO2 plant down) Rig up on Pr.Pr.

14-15D-12-15

**End Time** 

11:55 AM

Description

HES frac stage 7 North Horn 60Q foam frac. Load & Break @ 3,250 PSI @ 8.3 BPM. Avg. Wellhead Rate:38.6 BPM. Avg. SLurry Rate: 18.9 BPM. Avg. CO2 Rate:18 BPM. Avg. Pressure:4,872 PSI. Max. Wellhead Rate: 40.5 BPM. Max. Slurry rate: 27.1 BPM. Max. CO2 Rate: 25.2 BPM. Max. Pressure: 5,393 PSI. Total Fluid Pumped:28,944 Gal. Total; Sand in Formation: 116,000 lb. (20/40 White Sand) Praxair CO2 Downhole: 132 Tons. CO2 Cooldown: 8 Tons. ISIP:3,830PSI. Frac Gradient:1.08 psi/ft. Dropped Qty: 3 perf balls in pad stage and 3 balls in 2# sand stage. Successfully flushed wellbore with 30Q foam 30 bbl over flush with 500 gal. fluid

1:15 PM

BWWC EL stage 8 North Horn. PU HES CFP with 11 ft. perf guns. RIH correlate to short jt. run to setting depth set CFP @5440 ft. PU pressure up casing 500 psi over shut in. Perforate @ 5289-5294 5333-5336 & 5347-5350, 3 JSPF, 120 phasing, 19 gram charges, 390 holes. POOH turn well over to frac.

2:10 PM

HES frac stage 8 North Horn 60Q foam frac. Load & Break @3,153 PSI @ 13.1 BPM. Avg. Wellhead Rate: 38.3 BPM. Avg. Slurry Rate:18.9 BPM. Avg. CO2 Rate:17.6 BPM. Avg. Pressure:4,535 PSI. Max. Wellhead Rate: 40.8 BPM. Max. Slurry Rate: 28.2 BPM. Max. Co2 Rate: 26.1 BPM. Max. Pressure: 4.754 PSI. Total Fluid Pumped:23,796 Gal. Total Sand in Formation:92,200 lb.(20/40 White Sand) Praxair CO2 Downhole: 106 tons: CO 2 Downhole:8 tons. ISIP:3,340 PSI. Frac Gradient:1.07 psi/ft. Dropped Qty: 3 perf balls in pad stage and 3 balls in 2# sand stage. Successfully flushed wellbore with 30Q foam 30 bbl over flush with 500 gal. fluid

3:15 PM

BWWC EL stage 9 North Horn. PU HES CFP with 8 ft. perf guns. RIH correlate to short jt. run to setting depth set CFP @ 5190 ft. PU pressure up on casing. Perforate @ 5098-5106, 3 JSPF, 120 phasing, 19 gram charges, .390 holes. POOH turn well over to frac-

4:00 PM

HES frac stage 9 North Horn 60Q foam frac. Load & Break @ 3,759 PSI @ 15.4 BPM. Avg. Wellhead Rate: 19.5 BPM. Avg. Slurry Rate: 10 BPM. Avg. CO2 Rate: 8.7 BPM. Avg. Pressure: 3,792 PSI. Max. Wellhead Rate: 20.4 BPM. Max. Slurry Rate: 12.3 BPM. Max. CO2 Rate: 12.3 BPM. Max. Pressure: 4,107 PSI. Total Fluid Pumped: 8,454 Gal. Total Sand in Formation: 24,000 Lb. ( 20/40 White Sand) Linde CO2 Downhole: 32 tons.CO2 Cooldown: 8 ton

ISIP:3,120 PSI. FraGradient:1.05 psi/ft. Successfully flushed Phase/Areallbore with 500 gal. fluid cap.

11:59 PM

Flow stages 1-9 through Opsco flow equipment. Clean up for sales.

Bottom Hole Display 5:00 PAPI #/LicerSe Rig off frac tree. SENW-22-12S-15E-W26M 43-007-31361

Ops Date: 11/30/2008

Well Name: Prickly Pear Fed. #6-22D-12-15

Report #:

AFE #: 14748D

Summary: Shut in

**End Time** 

Description

11:59 PM

SI

WELLCORE

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 12/1/2008

Report #:

6

AFE #: 14748D

Summary: SICP: 1700, BWWC EL stage 5 frac #5. EL stage 6. Frac #6. El stage 7. Frac #7. El stage 8. Frac #8. El stage 9. Frac #9. SI. Rig off well head. Flow back stages 1-9 through Opsco equipment: ( Pure

CO2 plant down) Rig up on Pr.Pr.

14-15D-12-15

**End Time** 

5:30 AM 7:30 AM Shut in 900 psi.

BWWC El stage 5 frozen in wellhead . Pump 20 bbl KCL water. EL stage 5 Upper Dark Canyon. PU HES CFP witrh 12 ft. perf guns. RIH correlate to short it. run to setting depth set CFP @ 6830 FT. PU pressure up casing 500 psi over shut in. Perforate @ 6741-6747 & 6705-6711, 3 JSPF, 120 phasing, 19 gram charges. 390 holes.

Description

POOH turn well over to frac.

8:30 AM

HES Frac stage 5 Upper Dark Canyon 70Q foam frac. Load & Break @ 5,568 PSI @ 16.5 BPM. Avg. Wellhead Rate: 33.1 BPM. Avg. Slurry Rate: 13.4 BPM. Avg. Co2 Rate: 17.7 BPM. Avg. Pressure: 5745 PSI. Max. Wellhead Rate: 35.1 BPM. Max. Slurry Rate: 35.1 BPM. Max. CO2 Rate: 21.5 BPM. Max. Pressure: 6,077 PSI. Total Fluid Pumped: 17.284 Gal. Total Sand in Formation: 72,100 lb. (20/40 White Sand) Linde CO2 Downhole: 108 tons, CO2 Cooldown: 10 tons. ISIP: 3,870 PSI. Frac Gradient: 1.02 psi/ft. Dropped Qty: 3 perf balls in pad stage and 3 balls in 2# sand stage. Successfully flushed wellbore with 50Q foam 50 bbl ov er flush with 500 gal. fluid cap. (HES could not pump flush at rate due to

9:40 AM

BWWC EL Stage 6 North Horn. PU HES CFP with 6 ft perf guns. RIH correlate to short it. run to setting depth set CFP @ 6500 ft. PU pressure up 500 psi over shut in. Perforate 6410-6416, 3 jspf, 120 Phasing, 19 gram charges, .390 holes. POOH turn well over to frac.

10:30 AM

HES Frac stage 6 North Horn 60Q foam frac. Load & Break @4.968 PSI @ 16.1 BPM. Avg. Wellhead Rate:33.7 BPM. Avg. Slurry Rate: 16.8 BPM. Avg. CO2 Rate: 15.6 BPM. Avg. Pressure: 5,948 PSI. Max. Wellhead Rate36.9 : BPM. Max. Slurry Rate:24.3 BPM. Max. CO2 Rate:21.5 BPM. Max. Pressure:6,764 PSI, Total Fluid Pumped: 21,103 Gal. Total Sand in Formation:76,100 lb. (20/40 White Sand ) Linde CO2 Downhole: 100 Tons. CO2 Cooldown: 10 tons. ISIP:3,928 PSI. Frac Gradient:1.05 psi/ft. Successfully flushed wellbore with 30Q foam 30 bbl over flush with 500 gal. fluid

11:40 AM

BWWC EL Stage 7 North Horn. PU HES CFP with #3 ft. perf guns. RIH correlate to short it. run to setting depth set CFP @ 6120 ft. PU pressure up 500 psi over shut in. Perforate @ 6046-6054 & 5990-5995, 3 JSPF, 120 phasing, 19 gram charges, .390 holes. POOH turn well over to frac.

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 12/3/2008

Report #:

AFE #: 14748D

Summary: Flow stages 1-9 through Opsco. turn to

production sales

**End Time** 

Description

6:00 AM

flow stages 1-9 FCP: 720 psi on 48 ck. recovered 267 bbl in 24

hours CO2 14%. Gas Rate: 4,791 MMCFD

6:00 AM

Flow stages 1-9

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 12/2/2008

Report #:

AFE #: 14748D

Summary: Flow stages 1-9

**End Time** 

Description

6:00 AM

Flow stages 1-9 FCP: 815 psi on 48 ck. recovered 650 bbl in

12hours.

11:59 PM

flow stages 1-9 flare gas off. gas rate of 5,447 MMCFD with CO2

Form 3160-5 (August 2007)

## trailang CONFIDENTIAL

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

## **SUNDRY NOTICES AND REPORTS ON WELLS**

	FORM APPROVED OMB No. 1004-0137 Explics July 31, 2010
100	5/Tease Scrial No. UTU-0 (604)
	6. If Indian, Affottee or Tribe Name N/A

	form for proposals to Use Form 3160-3 (AF				N/A	
SUBMIT IN TRIPLICATE – Other instructions on page 2.  1. Type of Well  Oil Well  Gas Well  Other  2. Name of Operator Bill Barrett Corporation					7. If Unit of CA/Agreement, Name and/or No. Prickly Pear / UTU-79487	
					8. Well Name and No Prickly Pear Unit Fe	o. ederal 6-22D-12-15
					9. API Well No. 43-007-31361	
3a. Address 1099 18th Street, Suite 2300 Denver, CO 80202 303-312-8134			10. Field and Pool or Nine Mile/Wasatch-			
4. Location of Well (Footage, Sec., T., NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E	R.,M., or Survey Description)				11. Country or Parish Carbon County, UT	
12. CHEC	CK THE APPROPRIATE BOX	K(ES) TO INDI	CATE NATURI	OF NOTIC	CE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TY	PE OF ACT	ION	
☐ Notice of Intent  ✓ Subsequent Report	Acidize Alter Casing Casing Repair		n re Treat Construction	Recla	uction (Start/Resume) amation mplete	<ul><li>Water Shut-Off</li><li>Well Integrity</li><li>✓ Other Weekly Activity</li></ul>
Final Abandonment Notice	Change Plans Convert to Injection	☐ Plug a ☐ Plug F	nd Abandon lack		oorarily Abandon r Disposal	Reports
determined that the site is ready for Weekly completion activity reports f	• •	2/08 (report #'s	9-10).			
						RECEIVED 1 dec 29 2003
						DIV. OF OIL, GAS & MINING
14. I hereby certify that the foregoing is t Name (Printed/Typed) Tracey Fallang	gue and correct.	top	Title Regulato	ry Analyst		
Signature For	Tracey Fall	ang	Date 12/22/20	08		
	THIS SPACE F	OR FEDE	RAL OR ST	ATE OFF	ICE USE	
Approved by				<u> </u>		
Conditions of approval, if any, are attached that the applicant holds legal or equitable the entitle the applicant to conduct operations	itle to those rights in the subject thereon.	lease which wo	old Office			Date
Title 18 U.S.C. Section 1001 and Title 43	U.S.C. Section 1212, make it a c	crime for any per	son knowingly ar	d willfully to	make to any departmen	it or agency of the United States any false,

(Instructions on page 2)

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License
SENW-22-12S-15E-W26M	43-007-31361

Ops Date: 12/20/2008

Report #: 10

AFE #: 14748D

Summary: Kelly hose froze solid Chang out hose, drill out frac plug from stage 9 to stage 1,

Clean out rat hole, lay down tog to land EOT @ 4977 ND BOPs NU Production

tree

**End Time** 

7:00 AM

safety meeting

10:00 AM 5:00 PM

kelly hose froze up chang out

drill out plugs from stage 9 to stage 1 pumped 64 bbl with foam unit

CSG 550 psi cleaned ou 30 ft of fill to tag PBTD @7428 Circulated

Description

BTU pump 20 bbl kill to lay down TBG

6:30 PM

LD TBG to Land EOT @ 4977

7:30 PM 8:00 PM ND BOPs, NU Production tree pump bit off with foam unit 1400 psi

blow air out of TBG, turn to Production 4.3 MMCFD

Well Name: Prickly Pear Fed. #6-22D-12-15

Phase/Area

West Tavaputs

Bottom Hole Display	API #/License		
SENW-22-12S-15E-W26M	43-007-31361		

Ops Date: 12/19/2008

Report #:

AFE #: 14748D

Summary: Move in rig up, rig up black warior wire

line set plug @ 4970 PU TBG to drill out

kill plug, drill out Kill plug

**End Time** 

spot in

8:00 AM 9:00 AM

12:00 PM

rig up

Rig up Black Warrior to set CBP @4970

2:00 PM

Blow down CSG 800psi shut in, ND Frac tree NU BOPs

6:00 PM

Make up BHA 3 7/8 bit, pump off bit sub, 8 ft pup jt, XN-Nipple, 1 jt 2 3/8 N-80 TBG, X-Nipple, 151 jt 2 3/8 N-80 TBG to tag Plug @ 4970

Description

6:30 PM

Drill out kill plug CSG 750 psi Turned to sales for over night flow

DIV. OF OIL, GAS & MINING

### Form 3160-5 (August 2007)

## tfallang CONFIDENTIAL

UNITED STATES DEPARTMENT OF THE INTERIOR

# **BUREAU OF LAND MANAGEMENT**

**SUNDRY NOTICES AND REPORTS ON WELLS** Do not use this form for proposals to drill or to re-enter an

FORM APPROVED OMB No. 1004-0137

Expi	res: July 31, 2010
5. Lease Serial No. UTU-011604	:
6. If Indian, Allottee or 7	Tribe Name

abandoned well.	Jse Form 3160-3 (A	PD) for suc	h proposals	s			
SUBMIT	IN TRIPLICATE - Other	r instructions on	page 2.		7. If Unit of CA/Agreer Prickly Pear / UTU-79		nd/or No.
1. Type of Well					8. Well Name and No.	<del></del>	
Oil Well  Gas W	ell Other				Prickly Pear Unit Fed	eral 6-22D-	12-15
2. Name of Operator Bill Barrett Corporation					9. API Well No. 43-007-31361		
3a. Address 1099 18th Street, Suite 2300 Denver, CO 80202		3b. Phone No. (	include area cod	le)	10. Field and Pool or E. Nine Mile/Wasatch-M		ea
A. Location of Well (Footage, Sec., T.,I NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E	R.,M., or Survey Description	1)			11. Country or Parish, S Carbon County, UT	State	
12. CHEC	K THE APPROPRIATE BO	OX(ES) TO INDI	CATE NATURE	OF NOTIC	E, REPORT OR OTHE	R DATA	· · · · · · · · · · · · · · · · · · ·
TYPE OF SUBMISSION			TY	PE OF ACT	ION		
Notice of Intent	Acidize Alter Casing	=	n re Treat Construction	Recla	action (Start/Resume) amation mplete	Well In	Shut-Off ntegrity Weekly Activity
Subsequent Report	Casing Repair Change Plans	-	nd Abandon	=	porarily Abandon		eports
Final Abandonment Notice	Convert to Injection	Plug B			r Disposal	Co	orrected Dates
testing has been completed. Final determined that the site is ready for Final drilling activity reports were su	r final inspection.)					comproduct an	o die operator has
	· 						·
I hereby certify that the foregoing is Name (Printed/Typed)  Tracey Fallang	true and correct.		Title Regulat	ory Analyst		4	
Signature Miller	Fallane	4	Date 10/17/2	008		-	
	THIS SPACÉ	FOR FEDE	RAL OR ST	ATE OF	FICE USE		-
Approved by			Title	-		Date	
Conditions of approval, if any, are attache that the applicant holds legal or equitable	ed. Approval of this notice do title to those rights in the subj	es not warrant or c ject lease which wo	ertify				

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false,

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5 (April 2004)

1. Type of Well

3a. Address

Oil Well 🗆 🗆

550' FNL & 2039' FWL

TYPE OF SUBMISSION

✓ Notice of Intent

\_\_Subsequent Report

2. Name of Operator BILL BARRETT CORPORATION

1099 18th Street Suite 2300 Denver CO 80202

4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: NE/4 NW/4 SECTION 22-T12S-R15E S.L.B.&M.

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SHINDRY	NOTICES	AND	REPORTS	ON	WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160 - 3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE,

✓ Gas Well□□

Acidize

Alter Casing

Casing Repair

Change Plans

	FORM APPROVED OM B No. 1004-0137 Expires: March 31, 2007	2
g e	5. Lease Serial No. UTU 011604	
an (	6. If Indian Allottee of Tribo Name	
ide.	7. If Unit or CA/Agreement, Name and/or No.	
	Prickly Pear / UTU-79487	N-19 1-
	8. Well Name and No. PPU FED 6-22 Prickly Pear Unit Fed 3-22-12-15	D-12-15
code)	9. API Well No. 43007 <del>31187</del> -31361	
	10. Field and Pool, or Exploratory Area Nine Mile/Wasatch-Mesaverde	
	11. County or Parish, State	
	Carbon County, UT	
F NOTICE, RI	EPORT, OR OTHER DATA	
ACTION	·	
Production (Star Reclamation	Well Integrity	
Recomplete	Other Rev Measurement/ Layout	
Temporarily Ab Water Disposal	andon	
measured and true M/BIA. Require or recompletion in	y proposed work and approximate duration thereof. e vertical depths of all pertinent markers and zones. d subsequent reports shall be filed within 30 days a new interval, a Form 3160-4 shall be filed once ation, have been completed, and the operator has	
e as well as the	oil measurement method for this eight well	
	•	

Final Abandonment Notice \_ Water Dispos Convert to Injection Plug Back 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Requ following completion of the involved operations. If the operation results in a multiple completion or recompletio testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reck determined that the site is ready for final inspection.)

3b. Phone No. (include area code)

TYPE OF ACTION

\_ Temporarily

303 312-8134

Deepen

Fracture Treat

New Construction

Plug and Abandon

This Sundry is being submitted as notification that the facility equipment will change as well as t pad. The new equipment and measurement for this pad will be as follows:

- (2) 400-bbl oil tanks Combined oil tanks for all wells
- (1) 400-bbl water tank Combined water for all wells
- (1) 400-bbl blowdown tank
- (1) 400-bbl test oil tank

To allocate oil production, a quarterly test will be run for each well for a 24-hour time period into the 400-bbl test oil tank. A revised site security diagram will be submitted when facilities are complete. The spreadsheet attached indicates all wells in this pad and this sundry is applicable to all wells. **COPY SENT TO OPERATOR** 

Date: 1.29.2019

PECEN/ED

		A Montal Page United II No States States			
Initials: VS					
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)		DEC 2 3 2008			
Tracey Fallang	Title Regulatory Analyst	DIV OF OIL GAS & MINING			
Signature Salane	Date 12/1'	7/2008			
THIS SPACE, FOR FEDERAL OR STATE OFFICE USE					
Approved by Thursday	Title Pet Eng.	Date 1/21/09			
Conditions of approval, if any, are attached. Approval of this notice does not warrar certify that the applicant holds legal or equitable title to those rights in the subject less which would entitle the applicant to conduct operations thereon.	office Office	Federal Approval Of This Action Is Necessary			
Title 19 TICC Section 1001 and Title 42 TICC Section 1212 make it a crime for any	person knowingly and willfully to m	ake to any department or agency of the United			

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2) + Allocation tests for each well should be done on a monthly basis for the first 6 months minimum to establish proper allocation basis.

i	62	۵	-44

					_	_		_	
PRICKLY PEAR U FED 11-15D-12-15	CARBON	NENW	22	12S-15E	560	N	1992	W	UTU-65773
PRICKLY PEAR U FED 3-22-12-15	CARBON	NENW	22	12S-15E	550	N	2039	W	UTU-011604
PRICKLY PEAR U FED 5-22D-12-15	CARBON	NENW	22	12S-15E	557	N	2008	W	UTU-011604
PRICKLY PEAR U FED 7-22D-12-15	CARBON	NENW	22	12S-15E	553	N	2023	W	UTU-011604
PRICKLY PEAR U FED 14-15D-12-15	CARBON	NENW	22	12S-15E	712	N	2294	W	UTU-65773
PRICKLY PEAR U FED 6-22D-12-15	CARBON	NENW	22	12S-15E	716	N	2279	W	UTU-011604
PRICKLY PEAR U FED 13-15D-12-15	CARBON	NENW	22	12S-15E	719	N	2263	w	UTU-011604
PRICKLY PEAR U FED 4-22D-12-15	CARBON	NENW	22	12S-15E	722	N	2247	W	UTU-011604

Z	166	ls:	11)	66
	<b>bb</b> l	1. 25	8.5	و)ن
	601	1.0	250	ريان
that they have be	<b>b</b> bl		121	104
7	7		44.00	108
	?,		121	7 /26 41
	٦		07.54.7.3465.3	08 
	74	4 A.	34/	Y 10

DEC 2 3 2008

DIV. OF OIL, GAS & MINING

Form 3160-5 (August 2007)

1. Type of Well

3a. Address

Oil Well

TYPE OF SUBMISSION

Notice of Intent

Subsequent Report

2. Name of Operator Bill Barrett Corporation

1099 18th Street, Suite 2300 Denver, CO 80202

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) NENW, 716' FNL, 2279' FWL Sec. 22, T12S-R15E

## UNITED STATES DEPARTMENT OF THE INTER BUREAU OF LAND MANAGEME

ttallang

FORM APPROVED NMB <u>N</u>o. 1004-0137

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

Alter Casing

Casing Repair

\_\_ Change Plans

se this form for prop	REPORTS ON WELLS psals to drill or to re-enter an 60-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name N/A
SUBMIT IN TRIPLICATE - Other instructions on page 2.		7. If Unit of CA/Agreement, Name and/or No. Prickly Pear / UTU-79487
☑ Gas Well ☐ C	ther	8. Well Name and No. Prickly Pear Unit Federal 6-22D-12-15
		9. API Well No. 43-007-31361
	3b. Phone No. (include area code) 303-312-8134	10. Field and Pool or Exploratory Area Nine Mile/Wasatch-Mesaverde
e, Sec., T.,R.,M., or Survey De	scription)	11. Country or Parish, State Carbon County, UT
12. CHECK THE APPROPR	ATE BOX(ES) TO INDICATE NATURE OF NO	OTICE, REPORT OR OTHER DATA
ION	TYPE OF A	ACTION
Acidize		Production (Start/Resume) Water Shut-Off

Other Weekly Activity

Reports

Final Abandonment Notice Convert to Injection Plug Back Water Disposal 13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Fracture Treat

Plug and Abandon

**New Construction** 

Recomplete

Temporarily Abandon

No weekly completion activity report from 12/23/08 through 01/26/09. Completion report is pending submittal.

14. I hereby certify that the foregoing is true and correct.  Name (Printed/Typed)  Tracey Fallang  Tit	e Regulatory Analyst		
Signature Muy Fallany Da	e 01/26/2009		
THIS SPACE FOR FEDERA	L OR STATE OFFICE	E USE	
Approved by			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify	Title	Date	
that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any name	1 1 1 1 100		

me for any person knowingly and willfully to make to any department or agency of the United States any false. fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

JAN 29 2009

### Form 3160-5 (August 2007)

# **UNITED STATES**

# DEPARTMENT OF THE INTERIOR

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

**BUREAU OF LAND MANAGEMENT** 

N/A

FORM A	PPROVE	D
OMB No.	1004-013	37
Evniron: I	July 21 20	۱1

5. Lease Serial No. see attached		
5. If Indian, Allote N/A	72r (7	

apandoned Well.	Use Form 3160-3 (A	ארט) for such propos	als.			
SUBI	IIT IN TRIPLICATE - Othe	r instructions on page 2.		7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well				Prickly Pear/UTU-79	1487	
Oil Well  Gas	Well Other			8. Well Name and No. see attached PPU	Fed 6-220-1	2-15
Name of Operator Bill Barrett Corporation				9. API Well No.	007 31361	
3a. Address 1099 18th Street, Suite 2300		3b. Phone No. (include area of	ode)	10. Field and Pool or E	xploratory Area	
Denver, CO 80202		303-312-8134		see attached/Wasatc	ch-Mesaverde	
4. Location of Well (Footage, Sec., 7	.,R.,M., or Survey Description	1)		11. Country or Parish, S	State	
see attached	25 15E	22		Carbon County, UT		
12. CHE	CK THE APPROPRIATE BO	OX(ES) TO INDICATE NATUI	RE OF NOTIC	E, REPORT OR OTHE	R DATA	
TYPE OF SUBMISSION		Т	YPE OF ACTI	ON		
Notice of Intent	Acidize	Deepen	Produ	ction (Start/Resume)	Water Shut-Off	
	Alter Casing	Fracture Treat	Recla	mation	Well Integrity	
✓ Subsequent Report	Casing Repair	New Construction	Recon	nplete	Other Revised lay	out and
	Change Plans	Plug and Abandon	Tempe	orarily Abandon	measurement	
Final Abandonment Notice	Convert to Injection	Plug Back	Water	Disposal		
3. Describe Proposed or Completed the proposal is to deepen direction	Operation: Clearly state all penally or recomplete horizontal	rtinent details, including estimat	ed starting date	of any proposed work	and approximate duration t	thereof. It

ttallang

CONFIDENTIAL

Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

This sundy is being submitted as a follow up to clarify testing/allocation methods for the attached wells.

Initial testing would occur (or has occurred) as soon as possible after production is established and would be a 1-3 day test to get a baseline for allocation. After the intial test is performed, BBC would move to quarterly testing, testing each well for 7-10 days and rotating through the wells without any downtime between tests. Revised site security diagrams will be submitted as wells are completed.

COPY SENT TO OPERATOR

	military: 23
14. I hereby certify that the foregoing is true and correct.  Name (Printed/Typed)	
Tracey Fallang Ti	tle Regulatory Analyst
Signature Sallanes D.	ate 02/10/2009
THIS SPACE FOR FEDERA	AL OR STATE OFFICE USE
Approved by	Title Pet-Eng. Date 2/17/09
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certi- that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office DOG Federal Approval Of This Action Is Necessary RECEIVED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any

WELL NAME	FIELD	COUNTY	QTR/QTR	SEC	TWN-RNG	FOOT	AGE CALLS	LEASE #	# OF TANKS	
PRICKLY PEAR U FED 1-28-12-15	NINE MILE CANYON	CARBON	NENE	28	12S-15E	805	N 1184 E	T	# OF TANKS	
PRICKLY PEAR U FED 5-27D-12-15	NINE MILE CANYON	CARBON	NENE	28	12S-15E	795	<del></del>	UTU-0137844		
PRICKLY PEAR U FED 8-28D-12-15	NINE MILE CANYON	CARBON	NENE	. 28	12S-15E	800	N 1169 E			
PRICKLY PEAR U FED 9-28D-12-15	NINE MILE CANYON	CARBON	NENE	28	12S-15E	811	N 1199 E	+	(2) Multiple Well Prod Tanks (1) Prod Tank (9-28D)	
PRICKLY PEAR U FED 2-28D-12-15	NINE MILE CANYON	CARBON	NWNE	28	12S-15E	650	N 1412 E		(1) Test Tank	
PRICKLY PEAR U FED 5A-27D-12-15	NINE MILE CANYON	CARBON	NWNE	28	12S-15E	648		UTU-0137844	(1) Blowdown Tank	
PRICKLY PEAR U FED 16X-21D-12-15	NINE MILE CANYON	CARBON	NWNE	28	12S-15E	649	N 1396 E			
PRICKLY PEAR U FED 1A-28D-12-15	NINE MILE CANYON	CARBON	NWNE	28	12S-15E	648	N 1364 E			
PRICKLY PEAR U FED 11-15D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	560		UTU-65773		
PRICKLY PEAR U FED 3-22-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	550		UTU-011604		
PRICKLY PEAR U FED 5-22D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	557		UTU-011604		
PRICKLY PEAR U FED 7-22D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	553		UTU-011604	(3) Multiple Well Prod Tanks	
PRICKLY PEAR U FED 14-15D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	712	1	UTU-65773	(1) Test Tank	
PRICKLY PEAR U FED 6-22D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	716		UTU-011604	(1) Blowdown Tank	
PRICKLY PEAR U FED 13-15D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	719		UTU-65773	ĺ	
PRICKLY PEAR U FED 4-22D-12-15	PRICKLY PEAR	CARBON	NENW	22	12S-15E	722		UTU-011604		
PRICKLY PEAR UNIT 21-2	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1620		UTU-73670	The state of the s	
PRICKLY PEAR U FED 12-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1609	N 1256 W			
PRICKLY PEAR U FED 11-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1597	N 1266 W		(4) Multiple Well Prod Tanks	
PRICKLY PEAR U FED 4-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1585	N 1277 W		(1) Test Tank	
PRICKLY PEAR U FED 6-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1574	N 1288 W		(1) Blowdown Tank	
PRICKLY PEAR U FED 3-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1562	N 1298 W			
PRICKLY PEAR U FED 5-21D-12-15	NINE MILE CANYON	CARBON	SWNW	21	12S-15E	1550	N 1309 W	W W W	<b>!</b>	
PRICKLY PEAR U FED 13-22-12-15	NINE MILE CANYON	CARBON	SWSW	22	12S-15E	836	S 451 W	UTU-011604		
PRICKLY PEAR U FED 3-27D-12-15	NINE MILE CANYON	CARBON	SWSW	22	12S-15E	815		UTU-0137844		
PRICKLY PEAR U FED 4-27D-12-15	NINE MILE CANYON	CARBON	swsw	22	12S-15E	825		UTU-0137844	(5) Multiple Well Prod Tanks	
PRICKLY PEAR U FED 4A-27D-12-15	NINE MILE CANYON	CARBON	swsw	22	12S-15E	848		UTU-0137844	(1) Test Tank	
PRICKLY PEAR U FED 14-22D-12-15	NINE MILE CANYON	CARBON	SWSW	22	12S-15E	858		UTU-011604	(1) Blowdown Tank	
PRICKLY PEAR U FED 11-22D-12-15	NINE MILE CANYON	CARBON	swsw	22	12S-15E	869		UTU-011604	·	
PRICKLY PEAR U FED 12-22D-12-15	NINE MILE CANYON	CARBON	swsw	22	12S-15E	879		UTU-011604		
PRICKLY PEAR U FED 1-20-12-15	NINE MILE CANYON	CARBON	NENE	20	12S-15E	689		UTU-073669		
PRICKLY PEAR U FED 8-20D-12-15	NINE MILE CANYON	CARBON	NENE	20	12S-15E	700		UTU-073669	(3) Multiple Well Prod Tanks	
PRICKLY PEAR U FED 1A-20D-12-15	NINE MILE CANYON	CARBON	NENE	20	12S-15E	684		UTU-073669	(1) Test Tank	
PRICKLY PEAR U FED 2-20D-12-15	NINE MILE CANYON	CARBON	NENE	20	12S-15E	669		UTU-073669	(1) Blowdown Tank	

Form 3160-4 (August 2007)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137

														11 -11	$\mathcal{M}$	D) <b>(</b> V/
	N	/ELL	COM	PLETI	ON OR F	RECOMPLE	TION	REPORT	AND LO	G			ease Sei J-0116		クL	
la. Type of	Well	_	Oil Wel	171	Gas Well	Dry	Other								P. 76 . 3	
b. Type of				ell 🗀	Work Over	Deepen D	Plug E	Back 🔲 Diff	f. Resvr.,			N/A	ŕ	Allottee or		
			Other: _		·							Prici	kly Pea	A Agreemer ar / UTU-79	9487	ne and No.
<ol><li>Name of Bill Barret</li></ol>	Operator t Corporat	tion												me and Well ar UF #6-2:		2-15
3. Address	1099 18th S Denver, CO	street, S	Suite 2300					3a. Phone 1		area coa	(e)	9. A	FI Well	No.		
4. Location				clearly a	nd in accord	lance with Feder	ral requi		0134		- :		07-31 ield an	d Pool or Ex	plorat	orv
A+ avefor							_	•				Nine	Mile	Canyon/Wa	asatc	h-Mesaverde
At surrac	e NENW	, 716'	FNL, 2	279' FW	L							11. S	Sec., T., Jurvey o	R., M., on E or Area Sec.	Block a	and
At top pro	nd interval	renort	ed below	SENW	1892' FN	JL, 1984' FWL	Sec 2	22								
	051	•			•	,	., 000. 2	- <i>4</i> -				1	•	or Parish		3. State
At total d	cpui	VV, 18			FWL, Sec			16 Dota Cana	1-4-1 445	20/0000		I	on Co		1	JT
07/22/200	)8			09/07/20	008			16. Date Comp ☐D & A			l.	7200		ns (DF, RK	B, KT	, GL)*
18. Total D		75 D 72			19. Pl		MD 74		20.	Depth B	ridge Plug Se		MD N	I/A		
21. Type E	lectric & Ot	her Me	chanical		(Submit co	py of each)	1 110 12	217	22.		Il cored?	Z N	· 🗆	Yes (Submi		
Halliburto					mud	an Dan	. H2	I GR.	CCL	Was DS Direction	T run? nal Survey?	✓ No		Yes (Submit Yes (Submit		
23. Casing			(Report	all strin	gs set in we	1)			) T. C.							·
Hole Size	Size/Gr	ade	Wt. (#/	ft.) 7	op (MD)	Bottom (MD	) St	age Cementer Depth	No. of Type of		Slurry Vo (BBL)		Cem	ent Top*		Amount Pulled
20"	16" H40		65#	0		40'			grout cen				Surfac	се		
12 1/4"	9 5/8" J	-55	36#	0	· · · · · · · · · · · · · · · · · · ·	1457'			120 Prem		82 bbls		Surfac	e		
8 3/4" &	4 1/2" I-	80	11.6#	0		7508'			325 Pren 1740 50/		67 bbls 455 bbls	$\dashv$	250'			
7 7/8"						1			1740 007	00102	400 0013		200			
24. Tubing Size	Record Depth	Set (N	(D)   P	acker Der	th (MD)	Size	Det	oth Set (MD)	Packer Dep	th (MD)	Size		Dent	h Set (MD)	T	Packer Depth (MD)
2 3/8"	4977'	JUL (21.	-	40.00 20	(1412)	0120	1 20	stir bet (IVID)	T deker Dep	ui (ivii)	Size	7	Dept	ii Set (MD)		acker Depth (1915)
25. Produci					r	Dettem	26.	Perforation I		099		37 77				
A) Mesave	Formatio erde	<u>n</u>		6741'	Гор	7362'	734	Perforated In 7' - 7362'	terval	0.39	Size 4	No. H 5	oles	Open	Pert	Status
B) Wasate				5098'		6711'		6' - 7114'		0.39				Open	_	
C)							_	2' - 7015'	<del></del> -	0.39				Open		
D)							690	0' - 6938'		0.39	" 3	3		Open		
27. Acid, F	racture, Tre Depth Inter		t, Cemen	t Squeeze	, etc.				mount and	Type of l	Anterial					
7347' - 73		vui.		Stage	1: 70% CC	02 foam frac: 9	95 tons					Vhite:	sand	B		
7096' - 71	14'					O2 foam frac:				<u> </u>						
6972' - 70	15'			_		O2 foam frac:										
6900' - 69				Stage 4	4: 70% C	O2 foam frac:	166 ton	s CO2; 521	bbls total f	luid; 104	,100# 20/4	0 Wh	ite sar	nd		
28. Product Date First	Test Date		Те	st	Oil	Gas	Water	Oil Grav	itv	Gas	Product	ion Me	ethod			
Produced		Tested	1	duction	BBL		BBL	Corr. AF	· .	Gravity	Flowin					
12/1/08	12/12/08		_	<del>-&gt;</del>	0.82	3590.54	2.54									
Choke Size	Tbg. Press. Flwg.	Csg. Press.		Hr. te	Oil BBL		Water BBL	Gas/Oil Ratio	1	Well Stat Produci						
41/64"	SI 0			-			2.54			TOULC	· ·y					
28a. Produc	L	480 al B			0.82	3590.54	2.04				·					
Date First		Hours			Oil		Water	Oil Grav		Gas	Product	ion Me	thod	•		
Produced		Tested	ı Pro	duction	BBL	MCF	BBL	Corr. AP	'1 <b> </b>	Gravity						
Choke	Tbg. Press.	Cso	24	Hr	Oil	Gas	Water	Gas/Oil		Well Stat	10	*	Dr	^~·		
	Flwg. SI	Press.			BBL		BBL	Ratio		TON SIAL	40	š.	חב	CEIV	E	)

FEB 0 5 2009

<sup>\*(</sup>See instructions and spaces for additional data on page 2)

28b. Prod	uction - Inte	rval C	<del></del>			,				<del></del>
Date First Produced		Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg, Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	<u> </u>	
	ction - Inte			<del>-</del>				<u> </u>		
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
29. Dispos Sold	ition of Gas	(Solid, use	ed for fuel, ver	ited, etc.)	<del></del>	<u> </u>		-l		
30. Summ	ary of Poro	us Zones (	Include Aquif	ers):			<del> </del>	31. Formation	n (Log) Markers	
Show a including recover	ng depth into	zones of p	orosity and co	ntents ther	eof: Cored into	ervals and all d and shut-in pro	irill-stem tests, essures and			
Form	nation	Тор	Bottom		Descrip	otions, Content	s, etc.		Name	Top Meas. Depth
			olugging proce	•	ite cover. In	the event loc	a copies were not	Wasatch North Horn Dark Canyon Price River	ase contact Jim Kinser at 303	2863' 4964' 6738' 6947'  7518'
							bing relanded.	rocerrou, proc	ž	, 0.12 0.100.
33. Indicat	e which iter	ns have bee	en attached by	placing a	check in the ap	propriate boxe	s:			
			I full set req'd and cement ver	-		cologic Report ore Analysis	DST Repo	ort .	✓ Directional Survey	
34. I hereb	y certify tha	t the foreg	oing and attac	hed inform	nation is comple	ete and correct	as determined from a	all available rec	ords (see attached instructions)*	
Na	me (please)	_	cey Fallang	GII	(i a . 1)	<del></del>	Title Regulatory			
Sig	gnature		ung.	TUUL	avej		Date 02/02/2009			
					212, make it a			d willfully to m	ake to any department or agency of	of the United States any

(Form 3160-4, page 2)

(Continued on page 3)

## Prickly Pear Unit Federal #6-22D-12-15 Report Continued

26. PERFOR	RATION RECO	RD (cont.)	)			27. ACID, FR	ACTU	RE, TREATM	ENT, CE	EMENT SQUEEZI	E, ETC. (con	t.)
	ERVAL Bot-MD)	SIZE	NO. HOLES	PERFORATION STATUS						F MATERIAL		
6705'	6747'	0.39"	36	Open	Stg 5	70% CO2 foam frac:	108	tons CO2	412	bbls total fluid	72,100#	20/40 White Sand
6410'	6416'	0.39"	18	Open	Stg 6	70% CO2 foam frac:	100	tons CO2	503	bbls total fluid	76,100#	20/40 White Sand
5990'	6054'	0.39"	39	Open	Stg 7	70% CO2 foam frac:	132	tons CO2	689	bbls total fluid	116,000#	20/40 White Sand
5289'	5350'	0.39"	33	Open	Stg 8	70% CO2 foam frac:	106	tons CO2	567	bbls total fluid	92,200#	20/40 White Sand
5098'	5106'	0.39"	24	Open	Stg 9	70% CO2 foam frac:	32	tons CO2	201	bbls total fluid	24,000#	20/40 White Sand

<sup>\*</sup>Depth intervals for frac information same as perforation record intervals.

# **Directional Surveys**



**Location Information** 

**Business Unit** 

Project

Uinta

Operations

Phase/Area West Tavaputs

Well Name

Prickly Pear Fed. #6-22D-12-15

Surface Location

NENW-22-12S-15E-W26M

Main Hole

ļ	Bottom Hole Information								
	UWI	API / License #							
	SENW-22-12S-15E-W26M	43-007-31361							

Survey Section I	<u>Details</u>				
Section	KOP (ft)	KOP Date	TMD (ft)	TVD (ft)	TD Date
Main	1560.00	8/29/2008	1560.00		

Survey Company	Direction of Vertical Section (°)	Magnetic Dec. Correction (°)
WEATHERFORD	193.40	11.72

<u>Details</u>	1										
Extrap.	Depth MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Sub Sea (ft)	Northings (ft)	N/S	Eastings (ft)	E/W	Vertical Section (ft)	Dog Le
	0.00	0.00	0.00	0.00	20.00	0.00		0.00		0.00	0.00
	1509.00	0.31	286.96	1508.99	-1488.99	1.19	N	3.90	W	-0.25	0.02
	1572.00	0.88	195.34	1571.98	-1551.98	0.77	N	4.20	w	0.22	1.49
	1604.00	1.31	187.46	1603.98	-1583.98	0.17	N	4.31	W	0.83	1.42
	1636.00	2.31	186.59	1635.96	-1615.96	0.83	S	4.43	w	1.83	3.13
***	1668.00	3.44	188.71	1667.92	-1647.92	2.42	s	4.65	W	3.43	3.55
	1699.00	4.63	189.59	1698.84	-1678.84	4.57	s	5.00	w	5.61	3.84
	1763.00	7.75	185.96	1762.44	-1742.44	11.41	s	5.88	w	12.46	4.91
	1794.00	9.00	187.84	1793.11	-1773.11	15.89	s	6.42	w	16.95	4.13
	1826.00	9.69	190.84	1824.69	-1804.69	21.02	s	7.27	w	22.13	2.64
	1858.00	10.25	192.34	1856.20	-1836.20	26.44	s	8.39	w	27.67	1.93
	1890.00	10.75	192.59	1887.67	-1867.67	32.14	s	9.65	w	33.50	1.57
	1921.00	11.25	194.84	1918.10	-1898.10	37.88	S	11.05	w	39.41	2.13
	1985.00	12.13	194.96	1980.77	-1960.77	50.41	s	14.39	w	52.37	1.38
	2016.00	12.50	195.96	2011.05	-1991.05	56.78	s	16.15	w	58.98	1.38
	2048.00	12.75	197.46	2042.28	-2022.28	63.48	s	18.16	w	65.96	1.29
	2079.00	13.19	197.96	2072.49	-2052.49	70.11	s	20.28	w	72.90	1.46
	2111.00	13.94	197.96	2103.60	-2083.60	77.25	s	22.59	w	80.38	2.34
	2143.00	14.75	197.09	2134.60	-2114.60	84.81	s	24.98	w	88.29	2.62
	2175.00	15.19	198.21	2165.51	-2145.51	92.69	s	27.48	w	96.53	1.65
	2207.00	16.00	197.21	2196.33	-2176.33	100.88	s	30.10	w	105.11	2.67
	2238.00	16.69	197.59	2226.08	-2206.08	109.21	s	32.71	w	113.81	2.25
	2270.00	17.69	196.96	2256.65	-2236.65	118.24	s	35.52	w	123.25	3.18
	2301.00	18.63	195.09	2286.10	-2266.10	127.52	S	38.18	w	132.90	3.57
	2333.00	19.31	194.59	2316.36	-2296.36	137.58	s	40.84	w	143.30	2.18
	2365.00	20.06	194.84	2346.49	-2326.49	148.00	s	43.58	w	154.07	2.36
	2397.00	20.81	193.09	2376.48	-2356.48	158.84	s	46.27	W	165.24	3.02
	2428.00	21.50	193.59	2405.39	-2385.39	169.73	s	48.86	W	176.43	2.30
	2460.00	22.19	193.96	2435.09	-2415.09	181.29	S	51.69	W	188.34	2.20
	2492.00	23.06	194.21	2464.63	-2444.63	193.23	s	54.69	w	200.65	2.74
	2523.00	23.81	194.84	2493.07	-2473.07	205.17	s	57.78	w	212.97	2.55
	2555.00	24.13	193.71	2522.31	-2502.31	217.77	s	60.99	W	225.97	1.75
	2587.00	24.75	194.34	2551.44	-2531.44	230.61	s	64.19	w	239.21	2.10
	2619.00	25.06	193.46	2580.47	-2560.47	243.69	s	67.43	w	252.68	1.51
	2651.00	25.06	193.46	2609.45	-2589.45	256.87	s	70.59	W	266.24	0.00
	2683.00	25.19	194.71	2638.43	-2618.43	270.05	S	73.89	w	279.82	1.71
	2714.00	25.13	194.96	2666.49	-2646.49	282.79	s	77.27	w	293.00	0.39
	2809.00	24.88	193.84	2752.58	-2732.58	321.68	s	87.26	W	333.15	0.56
	2905.00	25.19	194.96	2839.56	-2819.56	361.03	s	97.36	W	373.76	0.59
	3000.00	25.50	195.34	2925.42	-2905.42	400.28	s	107.99	w	414.41	0.37
	3063.00	25.25	196.59	2982.34	-2962.34	426.24	s	115.41	w	441.38	0.94
	3127.00	24.75	196.59	3040.34	-3020.34	452.16	s	123.14	w	468.39	0.78
	3221.00	23.69	197.09	3126.06	-3106.06	489.07	s	134.30	w	506.88	1.15
	3317.00	24.88	196.21	3213.56	-3193.56	526.89	s	145.61	w	546.29	1.30
	3411.00	25.44	194.34	3298.65	-3278.65	565.44	s	156.13	w	586.23	1.03

# **Directional Surveys**



**Location Information** 

**Business Unit** 

Operations

Project Uinta Phase/Area West Tavaputs

Well Name Prickly Pear Fed. #6-22D-12-15 Surface Location

NENW-22-12S-15E-W26M

Main Hole

Extrap.	Depth MD (ft)	Inclination (°)	Azimuth (°)	TVD (ft)	Sub Sea (ft)	Northings (ft)	N/S	Eastings (ft)	E/W	Vertical Section (ft)	Dog Leg
	3506.00	25.50	196.34	3384.41	-3364.41	604.83	s	166.94	w	627.05	0.91
	3602.00	24.81	193.46	3471.31	-3451.31	644.25	S	177.44	W	667.83	1.46
	3697.00	25.19	191.84	3557.41	-3537.41	683.42	s	186.22	W	707.97	0.82
	3792.00	25.75	190.96	3643.17	-3623.17	723.47	s	194.30	W	748.80	0.71
	3887.00	25.88	191.84	3728.69	-3708.69	764.02	s	202.47	W	790.14	0.43
	3982.00	25.75	193.09	3814.21	-3794.21	804.41	s	211.40	W	831.50	0.59
	4077.00	25.25	193.46	3899.95	-3879.95	844.22	s	220.79	W	872.40	0.55
	4172.00	24.31	189.84	3986.20	-3966.20	883.19	S	228.85	W	912.18	1.88
	4267.00	23.69	189.59	4072.99	-4052.99	921.27	S	235.37	W	950.74	0.66
	4362.00	23.00	190.21	4160.21	-4140.21	958.36	S	241.84	W	988.31	0.77
	4426.00	22.69	190.46	4219.19	-4199.19	982.80	S	246.30	W	1013.13	0.51
	4520.00	21.19	193.34	4306.38	-4286.38	1017.16	S	253.51	W	1048.22	1.96
	4616.00	19.25	193.59	4396.45	-4376.45	1049.43	S	261.23	W	1081.40	2.02
	4711.00	18.06	194.71	4486.45	-4466.45	1078.89	S	268.65	W	1111.78	1.31
	4806.00	16.44	196.59	4577.17	-4557.17	1106.02	s	276.23	w	1139.92	1.80
	4901.00	14.81	196.46	4668.65	-4648.65	1130.54	S	283.51	w	1165.47	1.72
	4996.00	14.25	194.46	4760.61	-4740.61	1153.51	S	289.87	W	1189.28	0.79
	5091.00	13.38	189.34	4852.86	-4832.86	1175.68	S	294.57	W	1211.94	1.58
	5187.00	12.25	188.59	4946.46	-4926.46	1196.71	S	297.89	W	1233.17	1.19
	5282.00	10.63	189.59	5039.57	-5019.57	1215.31	S	300.86	W	1251.95	1.72
	5377.00	9.50	183.59	5133.10	-5113.10	1231.78	S	302.81	W	1268.42	1.62
	5473.00	7.81	187.71	5228.00	-5208.00	1246.15	S	304.18	w	1282.72	1.87
	5536.00	6.25	188.96	5290.52	-5270.52	1253.78	S	305.29	W	1290.39	2.49
	5600.00	5.19	193.96	5354.19	-5334.19	1260.03	S	306.53	W	1296.76	1.83
	5663.00	4.00	199.59	5416.99	-5396.99	1264.86	S	307.95	W	1301.80	2.02
	5727.00	2.44	206.46	5480.88	-5460.88	1268.19	S	309.31	W	1305.34	2.51
	5822.00	0.50	268.46	5575.84	-5555.84	1270:01	S	310.62	W	1307.42	2.37
	5917.00	0.44	278.46	5670.83	-5650.83	1269.97	S	311.40	W	1307.56	0.11
	5949.00	0.75	282.59	5702.83	-5682.83	1269.90	S	311.72	W	1307.57	0.98
	6044.00	0.88	285.34	5797.82	-5777.82	1269.57	S	313.04	W	1307.56	0.14
	6139.00	0.81	299.96	5892.81	-5872.81	1269.05	S	314.32	W	1307.34	0.24
	6234.00	0.94	287.21	5987.80	-5967.80	1268.48	S	315.65	W	1307.10	0.25
	6330.00	0.94	288.09	6083.79	-6063.79	1268.00	S	317.15	W	1306.98	0.02
	6425.00	1.00	305.09	6178.77	-6158.77	1267.28	S	318.57	W	1306.61	0.31
	6520.00	1.06	292.59	6273.76	-6253.76	1266.47	S	320.06	W	1306.16	0.24
	6615.00	1.00	289.96	6368.74	-6348.74	1265.85	S	321.65	W	1305.93	0.08
	6710.00	0.94	279.33	6463.73	-6443.73	1265.44	S	323.19	W	1305.89	0.20
	6806.00	1.06	275.71	6559.71	-6539.71	1265.22	S	324.86	W	1306.06	0.14
	6833.00	0.88	264.21	6586.71	-6566.71	1265.22	S	325.31	W	1306.16	0.98
	6878.00	0.52	241.21	6631.71	-6611.71	1265.35	S	325.83	W	1306.42	1.00
	7518.00	0.52	241.21	7271.68	-7251.68	1268.15	S	330.92	w	1310.32	0.00

Sundry Number: 17522 Approval of this: 43007313610000

Action is Necessary

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-011604
SUNDF	RY NOTICES AND REPORTS ON	I WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	sals to drill new wells, significantly deepen exist ugged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: PRICKLY PEAR
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: PPU FED 6-22D-12-15
2. NAME OF OPERATOR: BILL BARRETT CORP		<b>9. API NUMBER:</b> 43007313610000	
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , E	PHONE N Denver, CO, 80202 303 312-81		9. FIELD and POOL or WILDCAT: NINE MILE CANYON
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0716 FNL 2279 FWL			COUNTY: CARBON
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: ? Township: 12.0S Range: 15.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N.	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	☐ ACIDIZE ☐	ALTER CASING	☐ CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME
8/12/2011	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION
Date of Work Completion:		PLUG AND ABANDON	☐ PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
·	U TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	□ WATER SHUTOFF □	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:
12 DESCRIPE PROPOSED OR CO	DMPLETED OPERATIONS. Clearly show all pertinen		,
l .	to lower the tubing on this well to		biumes, etc.
	et at 4977'. Please contact Brian I		t
,	303.312.8183.		Accepted by the
			Utah Division of Oil, Gas and Mining
		Da	ate: $08/16/2011$
		_	1 lor K Junt
		By	<b>y</b> :
NAME (PLEASE PRINT) Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	TITLE Permit Analyst	
SIGNATURE		DATE 8/13/3011	
N/A		8/12/2011	

Sundry Number: 18869 API Well Number: 43007313610000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURC		FORM 9
	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-011604		
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	7.UNIT or CA AGREEMENT NAME: PRICKLY PEAR		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: PPU FED 6-22D-12-15		
2. NAME OF OPERATOR: BILL BARRETT CORP			9. API NUMBER: 43007313610000
3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300, E		NE NUMBER: 12-8164 Ext	9. FIELD and POOL or WILDCAT: NINE MILE CANYON
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0716 FNL 2279 FWL			COUNTY: CARBON
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NENW Section: 22	IP, RANGE, MERIDIAN: ? Township: 12.0S Range: 15.0E Meridian:	S	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Attached to this sund	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE □ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION  DMPLETED OPERATIONS. Clearly show all per ry are the procedures that too L5-16/2011. Please contact Br with questions.	ok place to lower the tubin rady Riley at 303-312-811 Oi	g
NAME (PLEASE PRINT)	PHONE NUMBER		
Brady Riley SIGNATURE	303 312-8115	Permit Analyst  DATE	
N/A		9/27/2011	

# Bill Barrett Corporation Daily Completion and Workover (legal size)

Well Name: Prickly Pear Fed. #					Fed. #6	I. #6-22D-12-15					Report # 1.0, Report Date: 8/1			
Well Nan		. #6-22D-		PI/UWI 3-007-3	1361		License #		Extra Well ID B		Operator Bill Barrett Co	rporation	Govt Authority BLM	
Well Con	figuration				Elevation (ft		Ground Elevat		KB-Ground Dista		Regulatory Drilling	Spud Date	Regulatory Rig F	Release Date
	_egal Loca		N	orth/South	Distance (f		North/South R	7,195.00 eference	East/West Dista		East/West Refere		Lat/Long Datum	
NENW W26M	/-22-128	S-15E-				716.0	FNL			2,279	.0 FWL		NAD27	
Latitude			Lo	ongitude (°	')		Basin		Field Name		County		State/Province	
Jobs Job Cate					Primary J						Start Date		End Date	
	etion/W epth (ftKB)	orkover	get Forma	ation	Worko		Number	AFE+Supp Amt (	Cost) Total Fld	Est (Cost)	8/ Total Final Invoice (C	10/2011 IVar (AFE-		/1/2011 Depth Drilled (ft)
							748EQP		50.00	21,563.00	2,380.		2,587.00	
Report S	Operation tart Date	ons		Report E	nd Date		Weathe	er		Ter	nperature (°F) Road	d Condition		
		/2011			8/11/2				Operations Nevt					
					Sundr	y Numl	ber: 18	3869 API W		per: 430	0073136100	000		
Daily (	Contact	s		(	Contact Nam	Α					Off	ice		
					ontaot Ham						011	100		
		eakdov												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Cate	egory		Phase	Prob I	Ref #		Co	om	
Safety	Safety Checks Time Des					7	Гуре				Com			
Logs														
	D	Date					Туре			Тор	(ftKB)		Btm (ftKB)	Cased?
Doufou	ation C													
Perior		ummar Date	<u>y</u>			Zone		Тор	(ftKB)		Btm (ftKB)		Current S	Status
	lation/T on <dtt< td=""><td>reatme</td><td>nt Stag</td><td>es</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></dtt<>	reatme	nt Stag	es										
Date Date	on call	.111/	Zo	one					Туре				Stim/Treat Com	pany
Sub														
Stg #		S	tage Type				Top (ft	KB)		Btm (ftKE	3)		Vol Clean Pump	(gal)
Other	In Hole				<u> </u>									
Other	In Hole	1	Des		1		R	Run Date	Ol	O (in)	Тор (	ftKB)	Btm	n (ftKB)
			Des				R	Run Date	Ol	O (in)	Top (	ftKB)	Btm	n (ftKB)
Other		Des					R		Ol	D (in)	Тор (	ftKB)		
							R			O (in)	Top (	ftKB)	Cement Comp	
							F			D (in)	Тор (	ftKB)		
							R			O (in)	Тор (	ftKB)		
							R			O (in)	Top (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							R			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Top (	ftKB)		
							F			O (in)	Тор (	ftKB)		
							F			O (in)	Top (	ftKB)		
							F			O (in)	Top (	ftKB)		
							F			O (in)	Top (	ftKB)		
							F			D (in)	Top (	ftKB)		
							F			D (in)	Top (	ftKB)		
							F			O (in)	Top (	ftKB)		
							F			D (in)	Top (	ftKB)		
							F	Start	Date		Top (	ftKB)		
							F	Start			Top (	ftKB)		

Sep. 27, 2011

# Bill Barrett Corporation Daily Completion and Workover (legal size)

Well Name: Prickly Pear Fed. #6-22D-12-15

Report # 2.0, Report Date: 9/15/2011

Phase:

Well Name				Extra Well ID B 14748 KB-Ground Distance (f	t) 20.00	Operator Bill Barrett Co Regulatory Drilling 8/29/200	Spud Date	Govt Authority BLM Regulatory Rig Release Date
Surface Legal Location NENW-22-12S-15E- W26M	North/South Distance (f			East/West Distance (ft	2,279.0	East/West Referen	се	Lat/Long Datum NAD27
Latitude (°)  Jobs	Longitude (°)	Basii	in	Field Name		County		State/Province
Job Category	Primary J					Start Date	10/0011	End Date
Completion/Workover Target Depth (ftKB) Target For	worko mation	AFE Num 14748E			Cost) To ,563.00	otal Final Invoice (C. 2,380.2		12/1/2011 ) (Cost)   Total Depth Drilled (ft) 2,587.00
Daily Operations Report Start Date 9/15/2011	Report End Date 9/16/2	2011	Weather			perature (°F) Road		
24 Hour Summary RIG UP, NUBOPS, LOWER SWAB CUPS STUCK, TRY			YUP&SWABABABC W	Operations Next Repo ELL Number	rt Period : 4300	073136100	00	
Daily Contacts	Contact Nam					Offic	ce	
BRENT HUCKINS								
Start End Cum	<del></del>							
Time         Time         Dur (hr)         Dur (h           00:00         01:30         1.50         1.5	r) Code Cat	egory Down	Phase	Prob Ref #	CRE	W SAFETY ME	Com EETIG, SPO	T IN RIG & RIG UP
01:30 02:30 1.00 2.5	0 BOPI Install B	OP's			10 B			EED DOWN TBG, PUMP UBOPS, RIG UP FLOOR
02:30 03:30 1.00 3.50	0 RUT Run Tub B	oing				UP 32 JTS TC	LAND TBG	@ 5986.25
03:30 04:30 1.00 4.5	0 BOP Remove	e BOP's				DOWN FLOOR /ELLHEAD	& EQUIPME	ENT, NDBOPS,
04:30 06:00 1.50 6.00	0 SWA Swab W B Down	/ell			TO T	AG, MAKE SW	AB RUN, SV	AKE TBG BROACH RUN VAB CUPS STUCK, BET FREE, SDFN
06:00 00:00 18.00 24.0	0 CTR Crew Tr	avel			CRE	W TRAVEL		
Safety Checks								
Time	Des		Ту	/ре			Cor	m
Logs Date			Туре		Top (ftl	KB)	Bt	m (ftKB) Cased?
Perforation Summary								
Date Stimulation/Treatment Sta	ages	Zone	Top (f	tKB)		Btm (ftKB)		Current Status
<typ> on <dttm> Date</dttm></typ>	Zone			Туре				Stim/Treat Company
Sub Stg # Stage Ty	ре		Top (ftKB)		Btm (ftKB)			Vol Clean Pump (gal)
Other In Hole	es		Run Date	OD (in)		Top (f	tKB)	Btm (ftKB)
<u>Des</u>			Start I	Date				Cement Comp
			RE	CEIVED_			-	

# Bill Barrett Corporation Daily Completion and Workover (legal size)

Well Name: Prickly Pear Fed. #6-22D-12-15

Report # 3.0, Report Date: 9/16/2011

Phase	hase:
-------	-------

Well Nar				PI/UWI			License #		Extra Well ID E	3		Operator			Govt Authority	
	Pear Fed.			3-007-3	31361 Elevation (f	ft)	Ground Eleva	ation (ft)	14748 KB-Ground Dis	stance (ft)		Bill Barret Regulatory D			BLM Regulatory Rig Relea	ase Date
Deviat			N	orth/South	n Distance (	7,215.00	North/South	7,195.00	East/West Dist	tanco (ft)	20.00		2008 00:		Lat/Long Datum	
NENW	/-22-125		IN	ortr/Soutr	n Distance (	716.0		Reference	East/West Dist		,279.0		erence		NAD27	
W26M Latitude			Lo	ongitude (	٥)		Basin		Field Name			County			State/Province	
Jobs			12.	originado (			Data		Triola riamo			·				
Job Cate Compl	egory etion/W	orkover			Worko	Job Type ver						Start Da	ate 8/10/20	11	End Date 12/1/2	2011
Target D	epth (ftKB)	Tar	get Forma	ation			Number 748EQP	AFE+Supp Amt (	Cost) Total FI	ld Est (Cost) 21,563		tal Final Invoic	e (C Vai		1) (Cost) Total Dep 2,587.00	oth Drilled (ft)
	Operation	ons				11-77			00.00	21,000	- '	·			2,007.00	
Report S	tart Date 9/16	2011		Report E	End Date 9/17/	/2011	Weath	ner			Tempe	erature (°F)	Road Condi	tion		
24 Hour	Summary	I SAF	ETV M	FETING	Swadi	e ve – Novemi	peri ci	ps,62maepi v	Operations Ne Iell Nur	xt Report Pe nber:	riod 4300	731361	0000			
FREE,	POOH	W/SW	AB EQ	UIPMEI	NT, POU	IR NEW R	OPE SOC	KET, MAKE								
						ED FLOWI ·15D & RU		RIG DOWN N								
	Contact						-									
BREN	T HUCK	INS		(	Contact Nan	ne							Office			
Daily '	Time Br	eakdov	vn													
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Code	Cat	tegory		Phase	Prot	Ref#				Com		
00:00	01:00	1.00	1.00	CTR	Crew Tr						CREV	V TRAVEL	, SAFET	Y MEE	TING, TBG	
01:00	05:30	4.50	5.50	SWA	Swab W	Vell					WOR	K STUCK	SWAB C	UPS. G	ET FREE, POOF	H W/
				В	Down						SWA	B CUPS, P	OUR NE	W ROP	E SOCKET, SW	
05:30	07:30	2.00	7.50	SRIG	Rig Up/l	Down						_, TBG STA				
07:30	09:00	1.50	9.00	SRIG	Rig Up/l	Down					SPOT	IN & RUF	RIG ON 1	4-15D,	SDFN	
09:00	00:00	15.00	24.00	CTR	Crew Tr	ravel					CREV	V TRAVEL	<u> </u>			
				L												
Safety	Check	S		Des	e .		1		Гуре					Co	m	
				DC.	<u> </u>			'	Турс					- 00		
Logs																
	D	ate					Туре				Top (ftK	(B)		Bi	tm (ftKB)	Cased?
Perfor	ation S	ıımmar	v													
Perfor	ation S	<b>ummar</b> Date	у			Zone		Тор	(ftKB)			Btm (ftKB)			Current Statu	s
		Date		100		Zone		Тор	(ftKB)			Btm (ftKB)			Current Statu	s
Stimu <typ></typ>		Date reatme		jes		Zone		Тор	(ftKB)			Btm (ftKB)			Current Statu	s
Stimu	lation/T	Date reatme	nt Stag	<b>Jes</b>		Zone		Тор	(ftKB)			Btm (ftKB)			Current Statu	
Stimu <typ> Date</typ>	lation/T	reatme m>	nt Stag	one		Zone	Ton			Rit	n (ftKB)	Btm (ftKB)			Stim/Treat Company	
Stimu <typ></typ>	lation/T	reatme m>	nt Stag	one		Zone	Тор (			Btr	n (ftKB)	Btm (ftKB)				
Stimu <typ> Date</typ>	lation/T	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)				Stim/Treat Company Vol Clean Pump (gal)	'
Stimu <typ> Date</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td></td><td>Туре</td><td>Btr OD (in)</td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone			Туре	Btr OD (in)	n (ftKB)		Fop (ftKB)		Stim/Treat Company	'
Stimu <typ> Date</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal)</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal)	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Top (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal)</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Top (ftKB)		Stim/Treat Company Vol Clean Pump (gal)	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Top (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Top (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>m (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		m (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>m (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		m (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)</td><td>Туре</td><td></td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)	Туре		n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)  Run Date  Start</td><td>Type</td><td>OD (in)</td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>'</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)  Run Date  Start	Type	OD (in)	n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	'
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)  Run Date  Start</td><td>Туре</td><td>OD (in)</td><td>n (ftKB)</td><td></td><td>Top (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>,</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)  Run Date  Start	Туре	OD (in)	n (ftKB)		Top (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	,
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)  Run Date  Start</td><td>Type</td><td>OD (in)</td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>,</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)  Run Date  Start	Type	OD (in)	n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	,
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)  Run Date  Start</td><td>Type</td><td>OD (in)</td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>,</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)  Run Date  Start	Type	OD (in)	n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	,
Stimu <typ> Date  Sub Stig #  Other</typ>	lation/T on <dtt< td=""><td>reatme m&gt;</td><td>nt Stag</td><td>one</td><td></td><td>Zone</td><td></td><td>ftKB)  Run Date  Start</td><td>Type</td><td>OD (in)</td><td>n (ftKB)</td><td></td><td>Fop (ftKB)</td><td></td><td>Stim/Treat Company Vol Clean Pump (gal) Btm (fth</td><td>,</td></dtt<>	reatme m>	nt Stag	one		Zone		ftKB)  Run Date  Start	Type	OD (in)	n (ftKB)		Fop (ftKB)		Stim/Treat Company Vol Clean Pump (gal) Btm (fth	,

Sundry Number: 21308 API Well Number: 43007313610000

		STATE	OF UTA	<u></u>					FORM 15
		DEPARTMENT OF N							AMENDED DEPORT
		DEPARTMENT OF N	AIUKA	. KESOUKCES	•				AMENDED REPORT
		DIVISION OF OIL	, GAS A	ND MINING				Orig	inal Filing Date: 12/15/2011
		DESIGNATION OF WORK	OVER C	R RECOMPLE	TIOI	٧			
1. Name of Operator			2. Utah /	Account Number			5. Well	Name and Nu	ımber
BILL BARRETT CORP			N2165				PPU F	ED 6-22D-12	-15
3. Address of Operator	City	State Zip	4. Phone	Number			6. API N	Number	_
1099 18th Street Ste 2300	Denver	CO 80202	303 312	2-8164			43007	31361	
9. Location of Well							7. Field	Name	
	NL 2279 FWL County: CA	ARBON						MILE CANYO	
QQ, Sec, Twnp, Rnge:	IENW 22 120S 150E State :	UTAH						Code Number	er
	A CAUDI ET			TIONIAL OUES	<b></b>		35		
10. TYPE OF WORK (Chec		E ALL SECTIONS. ATTAC	H ADD	HONAL SHEE	1511	NEE	DED.		
		11. WORK PERIOD					T 00 D E		
Production enhance	Recompletion	Date work commend		9/15/2011			90 Days F		
Convert to injection	n Repair well	Date work complete	a	9/16/2011			Completio	on	
Convert to injection	Tepali well								
12. THE FOLLOWIN	G EXPENSES FOR OPERA	TIONS ARE SUBMITTED F	OR DE			RKOV	ER OR REC		
- 1 41 41	and alarmon			Expense			i	Approved I	Sy State
a. Location preparation				0.0				0.00	
	rig-down (including trucking)			0.0				0.00	
c. Rig charges (includir				<u> </u>	32.00			8832	.00
d. Drill pipe or other wo				0.0				0.00	
	for circulating fluid (including water	r nauling)		0.0				0.00	
f. Equipment purchase				<u> </u>	70.00			6070	
g. Equipment rental				<u> </u>	750.00			1750	.00
h. Cementing				0.0				0.00	
i. Perforating				0.0				0.00	
j. Acidizing				0.0				0.00	
k. Fracture stimulation				0.0				0.00	
I. Logging services				<u> </u>	90.00			390.0	
m. Supervision and ove		i		<u> </u>	67.00			3167	
n. Other (itemize)	Plunger Lift			<u> </u>	355.00			1855	.00
	0			0.0				0.00	
	0			0.0				0.00	
	0			0.0				0.00	
o. Total submitted expe				22	2064.00	0			
p. Total approved expe	nses (State use only)							2206	4.00
13. LIST CONTRAC	TORS PROVIDING SERVICE							0 B	.144
			(City, Sta	(e)	_	100		Services Pro	vided
WILDCAT ENERGY SEF		BLANDING UT			=		COMPLETION		
BNS CONSULTING LLC		GRAND JUNCTION CO			_	ICC -	CONSULTING I	ENGINEER	
BOURLAND LEVERICH	SUPPLY CO	PAMPA TX				TCC	- TUBING		
14. LIST WORKING Name	INTEREST OWNERS WHO	TAKE PRODUCT IN KIND Address		RE AUTHORIZE	ED T	O SHA	RE IN THE		DIT. Percent of Interest
Name		Addiess	•			_i	Otan Accou	int No.	Tercent of interest
						=	<u></u>		
·						=	J		
						=			
I haraby cartify that	this report is true and com	nlete to the best of my kn	owloda	`					
NAME (PLEASE PRINT)					٦.	DHONE	202 202 22 12		
			_	et Team Accoutant	=		303 299-9942		
SIGNATURE Jeffrey Wie	eting	D	Dec Dec	ember 15, 2011	_ E	-MAIL	JWieting@billba	arrettcor	

### EQUIPMENT PURCHASE AND RENTAL SUPPORT FOR ALL BBC SUBMISSIONS ON 12-15-11

Trans#	Account	COST TYPE	Doc/Invoice	VALUE	WELL NAME	Cost Tp	Name	Description	Balance
25507135	10.860.120	EQUIP PURCH	11-MT-1	12820	Prickly Pear Fed 15-17-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 35 JTS 2-3/8" 1102' 4.7# L80, A	6,623.02
25507144	10.860.120	EQUIP PURCH	11-MT-1	12908	Prickly Pear Fed 1-27D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 21 JTS 2-3/8" 662' 4.7# L80, A	3,978.62
25507143	10.860.120	EQUIP PURCH	11-MT-1	13001	Prickly Pear Fed 5-22D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 44 JTS 2-3/8" 1386' 4.7# L80, A	8,329.86
25507137	10.860.120	EQUIP PURCH	11-MT-1	13349	Prickly Pear Fed 9-20D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 45 JTS 2-3/8" 1418' 4.7# L80, A	8,522.18
25507151	10.860.120	EQUIP PURCH	11-MT-1	13349	Prickly Pear Fed 9-20D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 14 JTS 2-3/8" 441' 4.7# L80, A	2,244.69
25507134	10.860.120	EQUIP PURCH	11-MT-1	13350	Prickly Pear Fed 11-17D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 47 JTS 2-3/8" 1486' 4.7# L80, A	8,930.86
25507140	10.860.120	EQUIP PURCH	11-MT-1	14747	Prickly Pear Fed 14-15D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 32 JTS 2-3/8" 1010' 4.7# L80, A	6,070.10
25507139	10.860.120	EQUIP PURCH	11-MT-1	14748	Prickly Pear Fed 6-22D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 32 JTS 2-3/8" 1010' 4.7# L80, A	6,070.10
25507142	10.860.120	EQUIP PURCH	11-MT-1	14750	Prickly Pear Fed 13-15D-12-15	TCC	BOURLAND LEVERICH SUPPLY CO LLC	C 33 JTS 2-3/8" 1040' 4.7# L80, A	6,311.73
25456363	10.840.180	EQUIP RENTAL	11-AP-2921	12820	Prickly Pear Fed 15-17-12-15	ICC	FAT DOG FOAM INC	- 2011-09-21 - FAT DOG FOAM INC - GAS SYSTEM FOR 9/21	3,435.00
24965890	10.840.180	EQUIP RENTAL	10-AP-2996	12820	Prickly Pear Fed 15-17-12-15	ICC	FAT DOG FOAM INC	- 2011-09-18 - FAT DOG FOAM INC - GAS SYSTEM FOR 9/18,9/19,9/20	10,050.00
24363805	10.840.180	EQUIP RENTAL	10-AP-1476	12820	Prickly Pear Fed 15-17-12-15	ICC	FAT DOG FOAM INC	- 2011-09-16 - FAT DOG FOAM INC - GAS SYSTEM 9/16	3,710.00
24965889	10.840.180	EQUIP RENTAL	10-AP-3289	13350	Prickly Pear Fed 11-17D-12-15	ICC	FAT DOG FOAM INC	- 2011-09-17 - FAT DOG FOAM INC - GAS SYSTEM 09/17	3,350.00
24986995	10.840.180	EQUIP RENTAL	10-AP-4881	14748	Prickly Pear Fed 6-22D-12-15	ICC	KR FISHING & RENTAL INC	- 2011-09-16 - KR FISHING & RENTAL INC - OPERATOR FOR KINLEY CUTTER	1,750.00
25462627	10.840.180	EQUIP RENTAL	11-AP-4708	12820	Prickly Pear Fed 15-17-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-26 - NABORS WELL SERVICES CO - SERVICE	264.88
24354018	10.840.180	EQUIP RENTAL	10-AP-1290	12820	Prickly Pear Fed 15-17-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-08 - NABORS WELL SERVICES CO - BOP RENTAL PACKAGE, MUD CROSS	900.07
25456303	10.840.180	EQUIP RENTAL	11-AP-2872	12908	Prickly Pear Fed 1-27D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-26 - NABORS WELL SERVICES CO - SERVICE	264.88
25511634	10.840.180	EQUIP RENTAL	12-AP-121	13001	Prickly Pear Fed 5-22D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-26 - NABORS WELL SERVICES CO - BOP	529.76
25462629	10.840.180	EQUIP RENTAL	11-AP-4693	13349	Prickly Pear Fed 9-20D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-26 - NABORS WELL SERVICES CO - SERVICE	264.88
25456295	10.840.180	EQUIP RENTAL	11-AP-3030	13349	Prickly Pear Fed 9-20D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-13 - NABORS WELL SERVICES CO - SERVICE	1,309.55
25462628	10.840.180	EQUIP RENTAL	11-AP-4418	13350	Prickly Pear Fed 11-17D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-26 - NABORS WELL SERVICES CO - SERVICE	259.58
24354017	10.840.180	EQUIP RENTAL	10-AP-1301	13350	Prickly Pear Fed 11-17D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-09-08 - NABORS WELL SERVICES CO - BOP RENTAL PACKAGE, MUD CROSS, RING GASKET	360.24
25456311	10.840.180	EQUIP RENTAL	11-AP-2917	14747	Prickly Pear Fed 14-15D-12-15	ICC	NABORS WELL SERVICES CO	- 2011-10-11 - NABORS WELL SERVICES CO - SERVICE	819.00
25032828	10.840.180	EQUIP RENTAL	11-AP-1053	13001	Prickly Pear Fed 5-22D-12-15	ICC	WESTROC TRUCKING INC	- 2011-09-20 - WESTROC TRUCKING INC - MOVE PUMP AND TANK	1,400.00
25033830	10.860.155	EQUIP PURCH	11-AP-570	13349	Prickly Pear Fed 9-20D-12-15	TCC	BENCO OIL SERVICES INC	- 2011-09-09 - BENCO OIL SERVICES INC - ANCHORS	593.00
25033839	10.860.155	EQUIP PURCH	11-AP-516	14747	Prickly Pear Fed 14-15D-12-15	TCC	BENCO OIL SERVICES INC	- 2011-10-10 - BENCO OIL SERVICES INC - ANCHORS	515.00
25033831	10.860.155	EQUIP PURCH	11-AP-861	14747	Prickly Pear Fed 14-15D-12-15	TCC	BENCO OIL SERVICES INC	- 2011-09-09 - BENCO OIL SERVICES INC - ANCHORS	743.00

	_				
_				-	
		_	w	_	_

## Division of Oil, Gas and Mining

## **OPERATOR CHANGE WORKSHEET (for state use only)**

ROUTING
CDW

X - Change of Operator (Well Sold)		Operator Name Change/Merger								
The operator of the well(s) listed below has change	ged, effectiv	e:	1/1/2014							
FROM: (Old Operator): N2165-Bill Barrett Corporation 1099 18th Street, Suite 230 Denver, CO 80202			TO: ( New Operator): N4040-EnerVest Operating, LLC 1001 Fannin Street, Suite 800 Houston, TX 77002							
Phone: 1 (303) 312-8134			Phone: 1 (713) 659-3500							
CA No.			Unit:							
WELL NAME	SEC TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS			
See Attached List										
OPERATOR CHANGES DOCUMENT.  Enter date after each listed item is completed  1. (R649-8-10) Sundry or legal documentation wa  2. (R649-8-10) Sundry or legal documentation wa  3. The new company was checked on the Departm  4a. Is the new operator registered in the State of U  5a. (R649-9-2) Waste Management Plan has been re  5b. Inspections of LA PA state/fee well sites compl  5c. Reports current for Production/Disposition & Si	s received finent of Contain: tah: ceived on: ete on: undries on:	rom the	e NEW operator e, Division of Co Business Numb Not Yet Yes 1/24/2014	on: orporations oer:	8850806-0161		1/28/2014			
6. <b>Federal and Indian Lease Wells:</b> The BL	M and or th	e BIA ł	nas approved the	merger, na	me change,					
or operator change for all wells listed on Federa 7. Federal and Indian Units: The PLM or PLA has approved the successor				BLM		BIA	_ N/A			
The BLM or BIA has approved the successor 8. Federal and Indian Communization Agr	-				Not Yet					
The BLM or BIA has approved the operator f		•	•		N/A					
9. Underground Injection Control ("UIC"				orm 5 Tran		ity to				
Inject, for the enhanced/secondary recovery un		_	_			Yes				
DATA ENTRY:			·	,	•		<del></del> -			
<ol> <li>Changes entered in the Oil and Gas Database of Changes have been entered on the Monthly Op</li> <li>Bond information entered in RBDMS on:</li> <li>Fee/State wells attached to bond in RBDMS on</li> </ol>	erator Cha	inge Sp	1/28/2014 1/28/2014		1/28/2014					
<ol> <li>Injection Projects to new operator in RBDMS of</li> <li>Receipt of Acceptance of Drilling Procedures for</li> <li>Surface Agreement Sundry from NEW operator</li> </ol>	or APD/Nev		1/28/2014 lls received on:		1/7/2014					
BOND VERIFICATION:										
<ol> <li>Federal well(s) covered by Bond Number:</li> <li>Indian well(s) covered by Bond Number:</li> <li>(R649-3-1) The NEW operator of any state/fed</li> <li>The FORMER operator has requested a release</li> </ol>			=	umber N/A	B008371					
<ul> <li>LEASE INTEREST OWNER NOTIFIC</li> <li>4. (R649-2-10) The NEW operator of the fee wells of their responsibility to notify all interest owner</li> <li>COMMENTS:</li> </ul>	has been co			y a letter fro 1/28/2014	om the Division					

W/-11 N/	- C	THAT		Prickly Pear C		> 6' 1 x			XXX 11 (D)	TYY 11 C
Well Name	Sec		1	API Number	Entity	Mineral I	Lease	Surface Lease	Well Type	Well Status
PPU FED 11-23D-12-15	_	120S	150E	4300731440		Federal		Federal	GW	APD
PPU FED 4-26D-12-15	/	120S	150E	4300731441		Federal		Federal	GW	APD
PPU FED 14-23D-12-15	_	120S	150E	4300731442		Federal		Federal	GW	APD
PPU FED 12-23D-12-15		120S	150E	4300731443		Federal		Federal	GW	APD
PRICKLY PEAR U FED 12-7D-12-15	-	120S	150E			Federal		Federal	GW	APD
PRICKLY PEAR U FED 11-7D-12-15		120S	150E	4300750095		Federal		Federal	GW	APD
PRICKLY PEAR U FED 13-7D-12-15		120S	150E	4300750096		Federal		Federal	GW	APD
PRICKLY PEAR U FED 14-7D-12-15		120S	150E	4300750097		Federal		Federal	GW	APD
PRICKLY PEAR UF 11-8D-12-15	8	120S	150E	4300750124		Federal		Federal	GW	APD
PRICKLY PEAR UF 12-8D-12-15	8	120S	150E	4300750125		Federal		Federal	GW	APD
PRICKLY PEAR UF 13-8D-12-15	8	120S	150E	4300750126		Federal		Federal	GW	APD
PRICKLY PEAR UF 14-8D-12-15	8	120S	150E	4300750127		Federal		Federal	GW	APD
PRICKLY PEAR UF 9-21D-12-15		120S	150E	4300750128		Federal		Federal	GW	APD
PRICKLY PEAR UF 9A-21D-12-15			150E	4300750129		Federal		Federal	GW	APD
PRICKLY PEAR UF 10-21D-12-15		120S	150E	4300750130		Federal		Federal	GW	APD
PRICKLY PEAR UF 10A-21D-12-15	21	120S	150E	4300750131		Federal		Federal	GW	APD
PRICKLY PEAR UF 15A-21D-12-15	21	120S	150E	4300750132		Federal		Federal	GW	APD
PRICKLY PEAR UF 15X-21D-12-15	21	120S	150E	4300750133		Federal		Federal	GW	APD
PRICKLY PEAR UF 16-21D-12-15	21	120S	150E	4300750134		Federal		Federal	GW	APD
PRICKLY PEAR UF 16A-21D-12-15	21	120S	150E	4300750135		Federal		Federal	GW	APD
PRICKLY PEAR UF 13A-22D-12-15	21	120S	150E	4300750148		Federal		Federal	GW	APD
PRICKLY PEAR UF 1A-27D-12-15	22	120S	150E	4300750161		Federal		Federal	GW	APD
PRICKLY PEAR UF 2A-27D-12-15	22	120S	150E	4300750162		Federal		Federal	GW	APD
PRICKLY PEAR UF 3A-27D-12-15	22	120S	150E	4300750163		Federal		Federal	GW	APD
PRICKLY PEAR UF 9A-22D-12-15	22	120S	150E	4300750164		Federal		Federal	GW	APD
PRICKLY PEAR UF 10A-22D-12-15	22	120S	150E	4300750165		Federal		Federal	GW	APD
PRICKLY PEAR UF 11A-22D-12-15	22	120S	150E	4300750166		Federal		Federal	GW	APD
PRICKLY PEAR UF 12A-22D-12-15	22	120S	150E	4300750167		Federal		Federal	GW	APD
PRICKLY PEAR UF 14A-22D-12-15	22	120S	150E	4300750168		Federal		Federal	GW	APD
PRICKLY PEAR UF 15A-22D-12-15	22	120S	150E	4300750169		Federal		Federal	GW	APD
PRICKLY PEAR UF 16A-22D-12-15	22	120S	150E	4300750170		Federal		Federal	GW	APD
PRICKLY PEAR UF 15A-15D-12-15	15	120S	150E	4300750180		Federal		Federal	GW	APD
PRICKLY PEAR UF 11B-15D-12-15	15	120S	150E	4300750181		Federal		Federal	GW	APD
PRICKLY PEAR UF 16A-15D-12-15	15	120S	150E	4300750184		Federal		Federal	GW	APD
PRICKLY PEAR UF 3A-18D-12-15	7	120S	150E	4300750185		Federal		Federal	GW	APD
PRICKLY PEAR UF 4A-18D-12-15				4300750186	i	Federal		Federal	GW	APD
PRICKLY PEAR UF 11A-7D-12-15	7	120S	150E	4300750187		Federal		Federal	GW	APD
PRICKLY PEAR UF 2-18D-12-15			150E	4300750188		Federal		Federal	GW	APD
PRICKLY PEAR UF 12A-7D-12-15			150E	4300750189		Federal		Federal	GW	APD
PRICKLY PEAR UF 13A-7D-12-15			150E	4300750190		Federal		Federal	GW	APD
PRICKLY PEAR UF 14A-7D-12-15	-		150E	4300750191		Federal		Federal	GW	APD
PRICKLY PEAR FEDERAL 1-12D-12-14			140E	4300750205		Federal		Federal	GW	APD
PRICKLY PEAR UF 2-12D-12-14			140E	4300750206		Federal		Federal	GW	APD
PRICKLY PEAR UF 7-12D-12-14			140E	4300750207		Federal		Federal	GW	APD
PRICKLY PEAR UF 7A-12D-12-14			140E	4300750208		Federal		Federal	GW	APD
PRICKLY PEAR UF 8-12D-12-14			140E	4300750209		Federal		Federal	GW	APD
PRICKLY PEAR UF 4-7D-12-15			140E	4300750210		Federal		Federal	GW	APD
PRICKLY PEAR UF 5-7D-12-15			140E	4300750211		Federal	<u>-</u>		GW	APD
PRICKLY PEAR UF 8A-12D-12-14			140E	4300750211		Federal			GW	APD
PRICKLY PEAR UF 5A-7D-12-15			140E	4300750212		Federal			GW	APD
PRICKLY PEAR UF 7-14D-12-15			150E	4300750213		Federal		Federal	GW	APD
PRICKLY PEAR UF 7A-14D-12-15				4300750214		Federal		Federal	GW	APD
PRICKLY PEAR UF 9-14D-12-15				4300750217		Federal		Federal	GW	APD
PRICKLY PEAR UF 9A-14D-12-15			150E	4300750217		Federal		Federal	GW	APD
PRICKLY PEAR UF 10-14D-12-15			150E			Federal		****		APD
PRICKLY PEAR UF 10-14D-12-15				4300750219		Federal				
TRICKLI TEAR OF 10A-14D-12-13	14	1203	IOUE	4300/30220		reueral		Federal	GW	APD

Well Name	Coo TWN		API Number		Min and Lagar	Comfort I	W-11 T	337-11 C4-4
PRICKLY PEAR UF 15A-14D-12-15	14 120S	150E	4300750222	Entity	Mineral Lease Federal		Well Type GW	Well Status
PRICKLY PEAR UF 16-14D-12-15	14 120S	150E	4300750222		Federal	Federal	GW	APD APD
PRICKLY PEAR UF 16A-14D-12-15	14 120S	150E	4300750224		Federal	Federal	GW	+
PRICKLY PEAR UF 1A-18D-12-15	7 120S	150E	4300750225		Federal	Federal	GW	APD
PRICKLY PEAR UF 2A-18D-12-15	7 120S	150E	4300750226		Federal	Federal		APD
PRICKLY PEAR UF 9A-7D-12-15	7 120S	150E	4300730220			Federal	GW	APD
PRICKLY PEAR UF 10A-7D-12-15	7 120S	150E			Federal	Federal	GW	APD
PRICKLY PEAR UF 15A-7D-12-15	7 120S		4300750228		Federal	Federal	GW	APD
PRICKLY PEAR UF 16A-7D-12-15	<del>                                     </del>	150E	4300750229		Federal	Federal	GW	APD
PRICKLY PEAR UF 9A-12D-12-14	7 120S	150E	4300750230		Federal	Federal	GW	APD
PRICKLY PEAR UF 10A-12D-12-14	12 120S	140E	4300750233		Federal	Federal	GW	APD
PRICKLY PEAR UF 15A-12D-12-14	12 1208	140E	4300750234		Federal	Federal	GW	APD
PRICKLY PEAR UF 13A-12D-12-14  PRICKLY PEAR UF 12A-8D-12-15	12 120S	140E	4300750235		Federal	Federal	GW	APD
	8 120S	150E	4300750236		Federal	Federal	GW	APD
PRICKLY PEAR UF 16A-12D-12-14	12 120S	140E	4300750237		Federal	Federal	GW	APD
PRICKLY PEAR UF 11A-8D-12-15	8 120S	150E	4300750238		Federal	Federal	GW	APD
PRICKLY PEAR UF 13A-8D-12-15	8 120S	150E	4300750239		Federal	Federal	GW	APD
PRICKLY PEAR UF 14A-8D-12-15	8 120S	150E	4300750240		Federal	Federal	GW	APD
PRICKLY PEAR UF 5A-8D-12-15	8 120S	150E	4300750260		Federal	Federal	GW	APD
PRICKLY PEAR UF 6A-8D-12-15	8 120S	150E	4300750261		Federal	Federal	GW	APD
PRICKLY PEAR UF 4-8D-12-15	8 120S	150E	4300750262		Federal	Federal	GW	APD
PRICKLY PEAR UF 3-8D-12-15	8 120S	150E			Federal	Federal	GW	APD
PRICKLY PEAR UF 2-8D-12-15	8 120S	150E	4300750264		Federal	Federal	GW	APD
PRICKLY PEAR UF 7A-8D-12-15	·	150E	4300750265		Federal	Federal	GW	APD
PRICKLY PEAR UF 7-8D-12-15		150E	4300750266		Federal	Federal	GW	APD
PRICKLY PEAR UF 5-8D-12-15	<del>                                     </del>	150E	4300750267		Federal	Federal	GW	APD
PRICKLY PEAR UF 6-8D-12-15		150E	4300750268		Federal	Federal	GW	APD
PRICKLY PEAR UF 10A-8D-12-15	<del>                                     </del>	150E	4300750269	-	Federal	Federal	GW	APD
PRICKLY PEAR UF 9A-8D-12-15		150E	4300750270		Federal	Federal	GW	APD
PRICKLY PEAR UF 8-8D-12-15		150E	4300750271		Federal	Federal	GW	APD
PRICKLY PEAR UF 1-8D-12-15	<del></del>	150E	4300750272		Federal	Federal	GW	APD
PRICKLY PEAR UF 8A-8D-12-15		150E	4300750273		Federal	Federal	GW	APD
PRICKLY PEAR UF 5-9D-12-15		150E	4300750274		Federal	Federal	GW	APD
PRICKLY PEAR UF 5A-9D-12-15		150E	4300750275		Federal	Federal	GW	APD
PRICKLY PEAR UF 4-9D-12-15		150E	4300750276		Federal	Federal	GW	APD
PRICKLY PEAR UF 3-9D-12-15			4300750277		Federal	Federal		APD
PRICKLY PEAR UF 6A-9D-12-15			4300750278		Federal	Federal	GW	APD
PRICKLY PEAR UF 11-9D-12-15		150E	4300750279		Federal	Federal	GW	APD
PRICKLY PEAR UF 12A-9D-12-15		150E	4300750280		Federal	Federal	GW	APD
PRICKLY PEAR UF 6-9D-12-15		150E	4300750281		Federal	Federal	GW	APD
PRICKLY PEAR UF 11A-9D-12-15	<del></del>	150E	4300750282		Federal	Federal	GW	APD
PRICKLY PEAR US 1X-16D-12-15		150E	4300750283		State	Federal	GW	APD
PRICKLY PEAR UF 5A-15D-12-15		150E	4300750284		Federal	Federal	GW	APD
PRICKLY PEAR UF 6A-15D-12-15		150E	4300750285		Federal	Federal	GW	APD
PRICKLY PEAR UF 3-15D-13-15		150E	4300750286		Federal	Federal	GW	APD
PRICKLY PEAR UF 15A-10D-12-15		150E	4300750287		Federal		GW	APD
PRICKLY PEAR UF 13-10D-12-15		150E	4300750288		Federal		GW	APD
PRICKLY PEAR UF 15-10D-12-15		150E	4300750289		Federal		GW	APD
PRICKLY PEAR UF 16A-10D-12-15	<u> </u>	150E	4300750290		Federal		GW	APD
PRICKLY PEAR UF 9-10D-12-15		150E	4300750291		Federal		GW	APD
PRICKLY PEAR UF 14A-10D-12-15		150E	4300750292				GW	APD
PRICKLY PEAR UF 10-10D-12-15		150E	4300750293		Federal		GW	APD
PRICKLY PEAR UF 16-10D-12-15			4300750294				GW	APD
PRICKLY PEAR UF 13-11D-12-15			4300750295					APD
PRICKLY PEAR UF 13A-11D-12-15			4300750296					APD
PRICKLY PEAR UF 12-11D-12-15			4300750297			Federal	GW	APD
PRICKLY PEAR UF 13A-10D-12-15	10 120S	150E	4300750298		Federal	Federal	GW	APD

Well Name	Cas TUAL		ARIAN-I		N 6' 1 T	C C I	W. 11 C	W. 11 C
PRICKLY PEAR UF 12-10D-12-15		+	API Number			<del> </del>	Well Type	Well Status
	10 1208	150E	4300750299		Federal	Federal	GW	APD
PRICKLY PEAR UF 11-10D-12-15 PRICKLY PEAR UF 3A-15D-12-15	10 1208	150E	4300750300		Federal	Federal	GW	APD
	10 1208	150E	4300750301	-	Federal	Federal	GW	APD
PRICKLY PEAR UF 12-14D-12-15	14 120S	150E	4300750302		Federal	Federal	GW	APD
PRICKLY PEAR UF 4-15D-12-15	10 120S	150E	4300750303	-	Federal	Federal	GW	APD
PRICKLY PEAR UF 4A-15D-12-15	10 1208	150E	4300750304		Federal	Federal	GW	APD
PRICKLY PEAR UF 14-10D-12-15	10 120S	150E	4300750305	<del></del>	Federal	Federal	GW	APD
PRICKLY PEAR UF 9A-17D-12-15	17 120S	150E	4300750306		Federal	Federal	GW	APD
PRICKLY PEAR UF 8A-17D-12-15	17 120S	150E	4300750307	+	Federal	Federal	GW	APD
PRICKLY PEAR UF 10A-17D-12-15	17 120S	150E	4300750308		Federal	Federal	GW	APD
PRICKLY PEAR UF 3-7D-12-15	7 120S	150E	4300750309		Federal	Federal	GW	APD
PRICKLY PEAR UF 16A-17D-12-15	17 120S	150E	4300750310		Federal	Federal	GW	APD
PRICKLY PEAR UF 6-7D-12-15	7 120S	150E	4300750311		Federal	Federal	GW	APD
PRICKLY PEAR UF 15A-17D-12-15	17 120S	150E	4300750312		Federal	Federal	GW	APD
PRICKLY PEAR UF 6A-7D-12-15	7 120S	150E	4300750313		Federal	Federal	GW	APD
PRICKLY PEAR UF 7A-7D-12-15	7 120S	150E	4300750314	i 	Federal	Federal	GW	APD
PRICKLY PEAR UF 8A-7D-12-15	7 120S	150E	4300750315		Federal	Federal	GW	APD
PRICKLY PEAR UF 6X-17D-12-15	17 120S	150E	4300750316		Federal	Federal	GW	APD
PRICKLY PEAR UF 11A-17D-12-15	17 120S	150E	4300750317		Federal	Federal	GW	APD
PRICKLY PEAR UF 15B-17D-12-15	17 120S	150E	4300750318		Federal	Federal	GW	APD
PRICKLY PEAR UF 8A-20D-12-15	20 120S	150E	4300750319		Federal	Federal	GW	APD
PRICKLY PEAR UF 1-7D-12-15	7 120S	150E	4300750320		Federal	Federal	GW	APD
PRICKLY PEAR UF 7A-20D-12-15	20 120S	150E	4300750321		Federal	Federal	GW	APD
PRICKLY PEAR UF 9A-20D-12-15	20 120S	150E	4300750322		Federal	Federal	GW	APD
PRICKLY PEAR UF 10A-20D-12-15	20 120S	150E	4300750323		Federal	Federal	GW	APD
PRICKLY PEAR UF 10-20D-12-15	20 120S	150E	4300750324		Federal	Federal	GW	APD
PRICKLY PEAR UF 2-7D-12-15	7 120S	150E	4300750325		Federal	Federal	GW	APD
PRICKLY PEAR UF 14A-20D-12-15	20 120S	150E	4300750326		Federal	Federal	GW	APD
PRICKLY PEAR UF 16A-20D-12-15	20 120S	150E	4300750327		Federal	Federal	GW	APD
PRICKLY PEAR UF 15A-20D-12-15	20 120S	150E	4300750328		Federal	Federal	GW	APD
PRICKLY PEAR UF 8-7D-12-15	7 120S	150E	4300750329		Federal	Federal	GW	APD
PRICKLY PEAR UF 15-20D-12-15	20 120S	150E	4300750330		Federal	Federal	GW	APD
PRICKLY PEAR UF 7-7D-12-15	7 120S	150E	4300750331		Federal	Federal	GW	APD
PRICKLY PEAR UF 6-10D-12-15	9 120S	150E	4300750332		Federal	Federal	GW	APD
PRICKLY PEAR UF 5A-10D-12-15	9 120S	150E	4300750333		Federal	Federal	GW	APD
PRICKLY PEAR UF 11A-10D-12-15	9 120S	150E	4300750334		Federal	Federal	GW	APD
PRICKLY PEAR UF 6A-10D-12-15	9 120S	1 <b>50</b> E	4300750335		Federal	Federal	GW	APD
PRICKLY PEAR UF 5-10D-12-15	9 120S	150E	4300750336		Federal	Federal	GW	APD
PRICKLY PEAR UF 12A-10D-12-15	9 120S	150E	4300750338		Federal	Federal	GW	APD
PRICKLY PEAR UF 3-10D-12-15		150E	4300750339		Federal	Federal	GW	APD
PRICKLY PEAR UF 4-10D-12-15	9 120S	150E	4300750340		Federal	Federal	GW	APD
PRICKLY PEAR UF 8-9D-12-15	9 120S	150E	4300750341		Federal	Federal	GW	APD
PRICKLY PEAR UF 8A-9D-12-15	9 120S	150E	4300750342		Federal	Federal	GW	APD
PRICKLY PEAR UF 7A-9D-12-15	9 120S	150E	4300750343		Federal	Federal	GW	APD
PRICKLY PEAR UF 7-9D-12-15	9 120S	150E	4300750344		Federal	Federal	GW	APD
PRICKLY PEAR UF 1-9D-12-15	9 120S	150E	4300750345		Federal	Federal	GW	APD
PRICKLY PEAR UF 2-9D-12-15	9 120S	150E	4300750346		Federal			APD
PRICKLY PEAR UF 1-24D-12-1	24 120S	150E	4300750348			Federal	GW	APD
PRICKLY PEAR UF 9-13D-12-15	13 120S	150E	4300750349				GW	APD
PRICKLY PEAR U FED 7-21D-12-15	21 120S	150E	4300750055				GW	OPS
PRICKLY PEAR US 1A-16D-12-15		150E	4300750192					OPS
PRICKLY PEAR US 2A-16D-12-15			4300750193					OPS
PRICKLY PEAR US 2-16D-12-15			4300750194					OPS
PRICKLY PEAR UF 9A-9D-12-15			4300750196					OPS
PRICKLY PEAR UF 10-9D-12-15			4300750197					OPS
PRICKLY PEAR UF 10A-9D-12-15			4300750198					OPS
					~~~		~	-1

Well Name	G TUDI		ear Unit	3.61 1.7	G C T	*** 11 m	TTT 11 0
Well Name				Mineral Lease		Well Type	Well Status
PRICKLY PEAR UF 14-9D-12-15	9 1208	·	0199 14794		Federal	GW	OPS
PRICKLY PEAR UF 14A-9D-12-15	9 1208	<del></del>	0200 14794		Federal	GW	OPS
PRICKLY PEAR UF 15-9D-12-15	9 1208		0201 14794		Federal	GW	OPS
PRICKLY PEAR UF 15A-9D-12-15	9 1208		0203 14794	l	Federal	GW	OPS
PRICKLY PEAR UF 16A-9D-12-15	9 1208		0204 14794		Federal	GW	OPS
STONE CABIN FED 2-B-27	27 120S		0018 14794		Federal	GW	P
PRICKLY PEAR ST 16-15	16 120S		0522 14794		State	GW	P
PRICKLY PEAR UNIT 21-2	21 120S		0828 14794	<u></u>	Federal	GW	P
PRICKLY PEAR U ST 13-16	16 120S		0933 14794		State	GW	P
PRICKLY PEAR U ST 11-16	16 120S		0944 14794	State	State	GW	P
PRICKLY PEAR U ST 7-16	16 120S	150E 430073	0945 14794	State	State	GW	P
PRICKLY PEAR U FED 7-25	25 120S	150E 430073	0954 14794	Federal	Federal	GW	P
PRICKLY PEAR U ST 36-06	36 120S	150E 430073	1018   14794	State	State	GW	P
PRICKLY PEAR U FED 13-23-12-15	23 120S	150E 430073	1073 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 1-27D-12-15	23 120S	150E 430073	1074 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 3-26D-12-15	23 120S	150E 430073	1075 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 15-22D-12-15	23 120S	150E 430073	1076 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 3-28D-12-15	21 120S	150E 430073	1121 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 15-21-12-15	21 120S	150E 430073	1164 14794	Federal	Federal	GW	P
PRICKLY PEAR U FED 13-21D-12-15	21 120S		1166 14794		Federal	GW	P
PRICKLY PEAR U FED 11-17D-12-15	17 120S		1184 14794	<del> </del>	Federal	GW	P
PRICKLY PEAR U FED 7-22D-12-15	22 120S		1186 14794		Federal	GW	P
PRICKLY PEAR U FED 3-22-12-15	22 120S		1187 14794		Federal	GW	P
PRICKLY PEAR U FED 5-22D-12-15	22 120S		1188 14794		Federal	GW	P
PRICKLY PEAR 11-15D-12-15	22 120S		1189 14794	· · · · · · · · · · · · · · · · · · ·	Federal	GW	P
PRICKLY PEAR U FED 9-18D-12-15	18 120S		1192 14794	- <del></del>	Federal	GW	P
PRICKLY PEAR U FED 15-18-12-15	18 120S		1193 14794		Federal	GW	P
PRICKLY PEAR U FED 16-27D-12-15	27 120S		1194 15569	<del></del>	Federal	GW	P
PRICKLY PEAR U FED 12-27D-12-15	27 120S		1195 15568		Federal	GW	P
PRICKLY PEAR U FED 9-20D-12-15	20 120S		1193 13308		Federal	GW	P
PRICKLY PEAR U FED 7-20-12-15	20 120S		1197 14794		Federal	GW	P
PRICKLY PEAR U FED 1-20-12-15	20 120S		1206 14794		Federal		P
PRICKLY PEAR U ST 4-36-12-15	36 120S		1200 14794 1227 14794			GW	
PRICKLY PEAR U FED 4-27D-12-15	22 120S	150E 430073			State	GW	P
PRICKLY PEAR U FED 13-22-12-15					Federal	GW	P
		150E 430073			Federal	GW	P
PRICKLY PEAR U FED 3-27D-12-15		150E 430073			Federal	GW	P
PRICKLY PEAR U ST 9-16-12-15		150E 430073			State	GW	P
PRICKLY PEAR U FED 9-28D-12-15	28 120S	150E 430073			Federal	GW	P
PRICKLY PEAR U FED 5-27D-12-15			1242 14794	<del> </del>	Federal	GW	P
PRICKLY PEAR U FED 1-28-12-15	28 120S		1243 14794		Federal	GW	P
PRICKLY PEAR U FED 8-28D-12-15	28 120S		1244 14794	<del></del> .	Federal	GW	P
PRICKLY PEAR U ST 1-16-12-15	16 120S		1245 14794	<del></del>	State	GW	P
PPU FED 11-18D-12-15			1257 14794	·	Federal	GW	P
PPU FED 11-20D-12-15			1258 14794	<del></del>	Federal	GW	P
PPU FED 4-25D-12-15	<del></del>		1259 14794	Federal	Federal	GW	P
PPU FED 12-25D-12-15			1260 16068	<del>i</del>	Federal	GW	P
PPU FED 14-26D-12-15	35 120S		1282 16224	Federal	Federal	GW	P
PPU FED 2-35-12-15	35 120S		1283 14794	Federal	Federal	GW	P
PPU FED 10-26D-12-15	35 120S	150E 430073	284 14794	Federal	Federal	GW	P
PPU FED 9-17-12-15	17 120S	150E 430073	287 14794	Federal	Federal	GW	P
PPU FED 1-17D-12-15	17 120S	150E 430073	288 14794	Federal	Federal	GW	P
PPU FED 7-17D-12-15		150E 430073			Federal	GW	P
PPU FED 1-18D-12-15		150E 430073				GW	P
PPU FED 7-18D-12-15		150E 430073				GW	P
PPU FED 5-17D-12-15		150E 430073				GW	P
PPU FED 10-17D-12-15		150E 430073				GW	P
		, 120070	,				-

		Prickly Pear U					
Well Name	Sec TWN	RNG API Number	Entity Miner	al Lease	Surface Lease	Well Type	Well Status
PPU FED 8-17D-12-15	17 120S	150E 4300731308			Federal	GW	P
PPU FED 12-17D-12-15	17 120S	150E 4300731309	14794 Feder	al	Federal	GW	P
PPU FED 13-17D-12-15	17 120S	150E 4300731310	14794 Feder	al	Federal	GW	P
PPU FED 14-17D-12-15	17 120S	150E 4300731311	14794 Feder	al	Federal	GW	P
PPU FED 16-18D-12-15	17 120S	150E 4300731312	14794 Feder	al	Federal	GW	P
PPU FED 8-18D-12-15	18 120S	150E 4300731313	14794 Feder	al	Federal	GW	P
PPU FED 3-18D-12-15	18 120S	150E 4300731314			Federal	GW	P
PPU FED 4-18-12-15	18 120S	150E 4300731315			Federal	GW	P
PPU FED 5-18D-12-15	+	150E 4300731316			Federal	GW	P
PPU FED 6-18D-12-15		150E 4300731317			Federal	GW	P
PPU FED 16-17D-12-15	+ +	150E 4300731321			Federal	GW	P
PPU ST 15-16D-12-15	16 120S	150E 4300731322			State	GW	P
PPU ST 16-16D-12-15		150E 4300731323			State	GW	P
PPU ST 14-16D-12-15		150E 4300731324			State	GW	P
PPU FED 3-21D-12-15		150E 4300731328			Federal	GW	P
PPU FED 4-21D-12-15	21 120S	150E 4300731329		_	Federal	GW	P
PPU FED 13-15D-12-15	<del> </del>	150E 4300731329 150E 4300731358			Federal	GW	P
PPU FED 14-15D-12-15	22 120S 22 120S	150E 4300731359			Federal	GW	P
PPU FED 4-22D-12-15	22 120S 22 120S	150E 4300731359			Federal	GW	P
PPU FED 6-22D-12-15	22 120S	150E 4300731361				GW	P
PPU FED 2-28D-12-15	<del>  </del>				Federal		P
PPU FED 16X-21D-12-15					Federal	GW	
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	<del></del>	150E 4300731363			Federal	GW	P
PPU FED 5A-27D-12-15		150E 4300731364			Federal	GW	P
PPU FED 1AA 18D 12-15	28 120S	150E 4300731368			Federal	GW	P
PPU FED 14A-18D-12-15	<u> </u>	150E 4300731393			Federal	GW	P
PPU FED 10-18D-12-15	<del></del>	150E 4300731394			Federal	GW	P
PPU FED 15A-18D-12-15		150E 4300731395			Federal	GW	P
PPU FED 16A-18D-12-15		150E 4300731396			Federal	GW	P
PPU FED 12-22D-12-15	·	150E 4300731398			Federal	GW	P
PPU FED 11-22D-12-15		150E 4300731399			Federal	GW	P
PPU FED 14-22D-12-15	·	150E 4300731400			Federal	GW	P
PPU FED 4A-27D-12-15		150E 4300731401			Federal	GW	P
PPU FED 11-21D-12-15		150E 4300731412			Federal	GW	P
PPU FED 6-21D-12-15		150E 4300731413			Federal	GW	P
PPU FED 12-21D-12-15	·	150E 4300731414			Federal	GW	P
PPU FED 8-20D-12-15		150E 4300731419			Federal	GW	P
PPU FED 1A-20D-12-15		150E 4300731420			Federal	GW	P
PPU FED 2-20D-12-15		150E 4300731421		<b>il</b> ]	Federal	GW	P
PPU ST 7A-16D-12-15	<del></del>	150E 4300731422		!	State	GW	P
PPU ST 6-16D-12-15		150E 4300731423			State	GW	P
PPU ST 10A-16D-12-15		150E 4300731424			State	GW	P
PPU ST 3-16D-12-15	16 120S	150E 4300731425	14794 State		State	GW	P
PPU FED 5-21D-12-15	21 120S	150E 4300731451	14794 Federa	ıl [1	Federal	GW	P
PPU ST 8-16D-12-15	16 120S	150E 4300731455	14794 State		State	GW	P
PPU ST 12-16D-12-15	16 120S	150E 4300731456	14794 State			GW	P
PPU ST 12A-16D-12-15		150E 4300731457				GW	P
PPU ST 15A-16D-12-15		150E 4300731458				GW	P
PPU ST 10-16D-12-15		150E 4300731459				GW	P
PPU ST 11A-16D-12-15		150E 4300731460				GW	P
PPU ST 13A-16D-12-15	- i	150E 4300731461				GW	P
PPU FED 10-7D-12-15		150E 4300731470				GW	P
PPU FED 15-7D-12-15	<del> </del>	150E 4300731471				GW	P
PPU FED 9-7D-12-15		150E 4300731471 1				GW	P
PPU FED 16-7D-12-15		150E 4300731472				GW	<u>г</u> Р
PPU ST 6A-16D-12-15	<del></del>	150E 4300731477				GW	P P
PPU ST 4-16D-12-15	·	150E 4300731477					
110014-100-12-13	10 1205	130E 4300/314/8	14/94 State		State	GW	P

			y Pear Unit				
Well Name	Sec TWN	RNG API N	lumber Entit	y Mineral Lease	Surface Lease	Well Type	Well Status
PPU ST 4A-16D-12-15	16 120S	·	731479 1479		State	GW	P
PPU ST 5A-16D-12-15	16 120S		731480 1479		State	GW	P
PPU ST 3A-16D-12-15	16 120S		731481 1479		State	GW	P
PPU ST 16A-16D-12-15	16 120S		731484 1479		State	GW	P
PPU ST 9A-16D-12-15	16 120S		731485 1479		State	GW	P
PPU ST 16B-16D-12-15	16 120S		731514 1479		State	GW	P
PPU ST 14B-16D-12-15	16 120S	150E 4300	731515 1479	94 State	State	GW	P
PPU ST 13B-16D-12-15	16 120S	150E 4300	731516 1479	94 State	State	GW	P
PRICKLY PEAR U FED 9-22D-12-15	22 120S		750041 1479		Federal	GW	P
PRICKLY PEAR U FED 10-22D-12-15	22 120S	150E 4300	750042 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 16-22D-12-15	22 120S	150E 4300	750043 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 2-27D-12-15	22 120S	150E 4300	750044   1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 16-15D-12-15	15 120S	150E 4300	750045 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 15-15D-12-15	15 120S	150E 4300	750046 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 10-15D-12-15	15 120S	150E 4300	750047 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 9-15D-12-15	15 120S	150E 4300	750048 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 11A-15D-12-15	15 120S	150E 4300	750049 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 1-21D-12-15	21 120S	150E 4300°	750050 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 2-21D-12-15	21 120S	150E 4300°	750051 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 2A-21D-12-15	21 120S	150E 4300°	750052 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 4A-22D-12-15	21 120S	150E 4300°	750053 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 5A-22D-12-15	21 120S	150E 4300°	750054 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 7A-21D-12-15	21 120S	150E 4300°	750056 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 8-21D-12-15	21 120S	150E 4300°	750057 1479	4 Federal	Federal	GW	P
PRICKLY PEAR U FED 8A-21D-12-15	21 120S		750058 1479		Federal	GW	P
PRICKLY PEAR U FED 16-8D-12-15	8 120S		750059 1479		Federal	GW	P
PRICKLY PEAR U FED 15-8D-12-15			750060 1479		Federal	GW	P
PRICKLY PEAR U FED 2-17D-12-15			750061 1479		Federal	GW	P
PRICKLY PEAR U FED 1A-17D-12-15			750062 1479		Federal	GW	P
PRICKLY PEAR U FED 1-22D-12-15			750076 1479		Federal	GW	P
PRICKLY PEAR U FED 2-22D-12-15		<del></del>	750077 1479		Federal	GW	P
PRICKLY PEAR U FED 8-22D-12-15			750078 1479		Federal	GW	P
PRICKLY PEAR U FED 3-17D-12-15			750079 1479	· · · · · · · · · · · · · · · · · · ·	Federal	GW	P
PRICKLY PEAR U FED 3A-17D-12-15			750080 1479		Federal	GW	P
			750081 1479			GW	P
PRICKLY PEAR U FED 4A-17D-12-15			750082 1479		Federal	GW	P
PRICKLY PEAR U FED 5A-17D-12-15			750083 1479			GW	P
PRICKLY PEAR U FED 6-17D-12-15			750084 1479			GW	P
PRICKLY PEAR U FED 6A-17D-12-15			750085 1479		Federal	GW	P
PRICKLY PEAR U FED 7A-17D-12-15			750086 1479		Federal	GW	P
PRICKLY PEAR U FED 9-12D-12-14			750088 1479		Federal	GW	P
PRICKLY PEAR U FED 10-12D-12-14			750089 1479				P
PRICKLY PEAR U FED 15-12D-12-14			750090 1479	<del></del>			P
PRICKLY PEAR U FED 16-12D-12-14		<del></del>	750091 1479				P
PRICKLY PEAR U FED 3-20D-12-15			750098 1479			GW	P
PRICKLY PEAR U FED 3A-20D-12-15			750098 1479 750099 1479	<del></del>			P .
PRICKLY PEAR U FED 4-20D-12-15			750100 1479				P P
PRICKLY PEAR U FED 4A-20D-12-15			750100 1479 750101 1479				<u>P</u>
PRICKLY PEAR U FED 5-20D-12-15			750101 1479 750102 1479				P I
PRICKLY PEAR U FED 5A-20D-12-15			750102 1479 750103 1479				P
PRICKLY PEAR U FED 6-20D-12-15			50103 1479 50104 1479				<u>Р</u> Р
PRICKLY PEAR U FED 6A-20D-12-15			50104 1479 50105 1479				
PRICKLY PEAR U FED 11A-20D-12-15			30103 1479 30106 1479	_ t			P
PRICKLY PEAR U FED 12A-20D-12-15			50106 1479				P
PRICKLY PEAR U FED 13A-17D-12-15							P
PRICKLY PEAR UF 7A-18D-12-15			50108 1479				P
I MICKL I FEAR OF /A-18D-12-13	17 120S	130E 43007	50136 1479	+ rederal	Federal_	GW	P

			THURIS FEAT	J1111C				
Well Name	Sec TWN	RNG	API Number	Entity	Mineral Lease	Surface Lease	Well Type	Well Status
PRICKLY PEAR UF 8A-18D-12-15	17 120S	150E	4300750137	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 9A-18D-12-15	17 120S	150E	4300750138	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 12-20D-12-15	20 120S	150E	4300750139	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 16A-8D-12-15	8 120S	150E	4300750140	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 15A-8D-12-15	8 120S	150E	4300750141	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 13A-9D-12-15	8 120S	150E	4300750142	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 13-9D-12-15	8 120S	150E	4300750143	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 12-9D-12-15	8 120S	150E	4300750144	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 10-8D-12-15	8 120S	150E	4300750145	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 9-8D-12-15	8 120S	150E	4300750146	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 2A-17D-12-15	8 120S	150E	4300750147	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 1A-22D-12-15	22 120S	150E	4300750171	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 2A-22D-12-15	22 120S	150E	4300750172	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 6A-22D-12-15	22 120S	150E	4300750173	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 7A-22D-12-15	22 120S	150E	4300750174	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 8A-22D-12-15	22 120S	150E	4300750175	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 14B-15D-12-15	22 120S	150E	4300750176	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 9-9D-12-15	9 120S	150E	4300750195	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 16-9D-12-15	9 120S	150E	4300750202	14794	Federal	Federal	GW	P
PRICKLY PEAR UF 8-14D-12-15	14 120S	150E	4300750216	18289	Federal	Federal	GW	P
PRICKLY PEAR UF 15-14D-12-15	14 120S	150E	4300750221	18290	Federal	Federal	GW	P
PRICKLY PEAR U ST 5-16	16 120S	150E	4300730943	14794	State	State	GW	S
PRICKLY PEAR U FED 7-28D-12-15	21 120S	150E	4300731165	14794	Federal	Federal	GW	S
PRICKLY PEAR U FED 15-17-12-15	17 120S	150E	4300731183	14794	Federal	Federal	GW	S
PRICKLY PEAR U FED 10-27-12-15	27 120S	150E	4300731196	15570	Federal	Federal	GW	S
PPU FED 4-35D-12-15	35 120S	150E	4300731285	16223	Federal	Federal	GW	S
PRICKLY PEAR U FED 12A-17D-12-15	17 120S	150E	4300750087	14794	Federal	Federal	GW	S
	1 1	;				1	1 - **	·-

**STATE OF UTAH**DEPARTMENT OF NATURAL RESOURCES

-	-~	$\overline{}$		
r	-()	ĸ	IV	١ ١

Ī	DIVISION OF OIL, GAS AND MI	INING	5. LEASE DESIGNATION AND SERIAL NUMBER: (see attached well list)								
SUNDRY	NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:								
			N/A 7. UNIT or CA AGREEMENT NAME:								
drill horizontal la	ew wells, significantly deepen existing wells below curterals. Use APPLICATION FOR PERMIT TO DRILL	form for such proposals.	8, WELL NAME and NUMBER:								
OIL WELL	GAS WELL OTHER_		(see attached well list)								
2. NAME OF OPERATOR: ENERVEST OPERATING	, LLC		9. API NUMBER:								
3. ADDRESS OF OPERATOR: 1001 FANNIN, ST. STE 800 CITY	, HOUSTON STATE TX ZIF	PHONE NUMBER: (713) 659-3500	10. FIELD AND POOL, OR WILDCAT:								
4. LOCATION OF WELL	STATE ZIF	(1.10) 000 0000									
FOOTAGES AT SURFACE: (see af	ttached well list)		COUNTY:								
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:											
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA											
	ROPRIATE BOXES TO INDICAT		DRT, OR OTHER DATA								
TYPE OF SUBMISSION	ACIDIZE	TYPE OF ACTION  DEEPEN	REPERFORATE CURRENT FORMATION								
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL								
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON								
1/1/2014	CHANGE TO PREVIOUS PLANS	✓ OPERATOR CHANGE	TUBING REPAIR								
-	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE								
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL								
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF								
Date of Hom composition	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:								
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION									
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all	pertinent details including dates, depths, volun	nes, etc.								
ATTACHED LIST HAVE B	BEEN SOLD TO ENERVEST OP	INDRY AS NOTIFICATION THA PERATING, LLC BY BILL BILL BA ORRESPONDENCE TO THE AD	ARRETT CORPORATION								
EnerVest Operating, L.L.C 1001 Fannin, Suite 800 Houston, Texas 77002 713-659-3500 (BLM BOND #	•	30ND# <u>B0083<i>7</i>/</u>	)								
BILL BARRETT CORPOR	RATION	ENERVEST OPERA	TING, LLC								
Duane Zai	vadivame (PLEASE PRINT)	ROWNE L YOU	ルム NAME (PLEASE PRINT)								
No Dayle	- D										
Senior Vice President - EH&S, Government and Regulatory	SIGNATURE  Affairs N21165	DIRECTOR - REGUL	SIGNATURE ATORY NYOYO								
NAME (PLEASE PRINT) RONNIE Y		TITLE DIRECTOR - RE	EGULATORY								
SIGNATURE TO THE SIGNATURE	i L Lloung	DATE 12/10/2013	·								
(This space for State use on	ROVED		RECEIVED								

JAN 28 2013 4 - RX Ochel Mec (See Instructions on Reverse Side)

Well Name	Sec	TWN	RNG	API Number	Entity Lease	Well T	ype   Well Status	Unit
JACK CANYON UNIT 8-32	32	120S	<del>'</del>	4300730460	15167 State	WI	A	
JACK CYN U ST 14-32	32	120S	160E	4300730913	15166 State	WD	A	
PRICKLY PEAR U FED 12-24	24	120S	140E	4300730953	14467 Federal	WD	A	
PPU FED 11-23D-12-15	23	120S	150E	4300731440	Federal	GW	APD	PRICKLY PEAR
PPU FED 4-26D-12-15	23	120S	150E	4300731441	Federal	GW	APD	PRICKLY PEAR
PPU FED 14-23D-12-15	23	120S		4300731442	Federal	GW	APD	PRICKLY PEAR
PPU FED 12-23D-12-15	23	120S	150E	4300731443	Federal	GW	APD	PRICKLY PEAR
PPU FED 11-34D-12-16	34	120S	160E	4300731465	Federal	GW	APD	PETERS POINT
PPU FED 10-34D-12-16	34	120S	160E	4300731469	Federal	GW	APD	PETERS POINT
HORSE BENCH FED 4-27D-12-16	27	120S	160E	4300750092	Federal	GW	APD	
HORSE BENCH FED 5-27D-12-16	27	120S		4300750093	Federal	GW	APD	
PRICKLY PEAR U FED 12-7D-12-15	07	120S	150E	4300750094	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 11-7D-12-15	07	120S		4300750095	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 13-7D-12-15	07	120S		4300750096	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR U FED 14-7D-12-15	07	120S	150E	4300750097	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-8D-12-15	08	120S	150E	4300750124	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-8D-12-15	08	120S	150E	4300750125	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-8D-12-15	08	120S		4300750126	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14-8D-12-15	08	120S		4300750127	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-21D-12-15	21	120S		4300750128	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-21D-12-15	21	120S		4300750129	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-21D-12-15	21	120S		4300750130	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-21D-12-15	21	120S		4300750131	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-21D-12-15	21	120S	150E	4300750132	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15X-21D-12-15	21	120S		4300750133	Federal .	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-21D-12-15	21	120S		4300750134	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-21D-12-15	21	120S		4300750135	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-22D-12-15	21	120S	150E	4300750148	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1A-27D-12-15	22	120S	150E	4300750161	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2A-27D-12-15	22	120S	150E	4300750162	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-27D-12-15	22	120S	150E	4300750163	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-22D-12-15	22	120S	150E	4300750164	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-22D-12-15	22	120S	150E	4300750165	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-22D-12-15	22	120S	150E	4300750166	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-22D-12-15	22	120S	150E	4300750167	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-22D-12-15	22	120S	150E	4300750168	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-22D-12-15	22	120S	150E	4300750169	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-22D-12-15	22	120S	150E	4300750170	Federal	GW	APD	PRICKLY PEAR
PETERS POINT UF 15X-36D-12-16	36	120S	160E	4300750178	Federal	GW	APD	PETERS POINT
PRICKLY PEAR UF 15A-15D-12-15	15	120S	150E	4300750180	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11B-15D-12-15	15	120S	150E	4300750181	Federal	GW	APD	PRICKLY PEAR
PETERS POINT UF 10-1D-13-16	36	120S	160E	4300750182	Federal	GW	APD	PETERS POINT
PETERS POINT UF 9-1D-13-16	36	120S	160E	4300750183	Federal	GW	APD	PETERS POINT
PRICKLY PEAR UF 16A-15D-12-15	15	120S	150E	4300750184	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-18D-12-15	07	120S	150E	4300750185	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4A-18D-12-15	07	120S	150E	4300750186	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-7D-12-15	07	120S	150E	4300750187	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-18D-12-15	07	120S	150E	4300750188	Federal	GW	APD	PRICKLY PEAR

PRICKLY PEAR UF 12A-7D-12-15	07	120S	150E 4300750189	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-7D-12-15	07	120S	150E 4300750190	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-7D-12-15	07	120S	150E 4300750191	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR FEDERAL 1-12D-12-14	12	120S	140E 4300750205	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-12D-12-14	12	120S	140E 4300750206	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-12D-12-14	12	120S	140E 4300750207	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-12D-12-14	12	120S	140E 4300750208	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-12D-12-14	12	120S	140E 4300750209	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-7D-12-15	12	120S	140E 4300750210	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-7D-12-15	12	120S	140E 4300750211	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-12D-12-14	12	120S	140E 4300750212	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-7D-12-15	12	120S	140E 4300750213	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-14D-12-15	14	120S	150E 4300750214	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-14D-12-15	14	120S	150E 4300750215	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-14D-12-15	14	120S	150E 4300750217	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-14D-12-15	14	120S	150E 4300750218	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-14D-12-15	14	120S	150E 4300750219	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-14D-12-15	14	120S	150E 4300750220	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-14D-12-15	14	120S	150E 4300750222	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-14D-12-15	14	120S	150E 4300750223	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-14D-12-15	14	120S	150E 4300750224	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1A-18D-12-15	07	120S	150E 4300750225	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2A-18D-12-15	07	120S	150E 4300750226	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-7D-12-15	07	120S	150E 4300750227	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-7D-12-15	07	120S	150E 4300750228	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-7D-12-15	07	120S	150E 4300750229	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-7D-12-15	07	120S	150E 4300750230	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-12D-12-14	12	120S	140E 4300750233	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-12D-12-14	12	120S	140E 4300750234	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-12D-12-14	12	120S	140E 4300750235	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-8D-12-15	08	120S	150E 4300750236	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-12D-12-14	12	120S	140E 4300750237	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-8D-12-15	08	120S	150E 4300750238	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-8D-12-15	08	120S	150E 4300750239	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-8D-12-15	08	120S	150E 4300750240	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-8D-12-15	08	120S	150E 4300750260	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-8D-12-15	08	120S	150E 4300750261	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-8D-12-15	08	120S	150E 4300750262	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-8D-12-15	08	120S	150E 4300750263	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-8D-12-15	08	120S	150E 4300750264	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-8D-12-15	08	120S	150E 4300750265	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-8D-12-15	08	120S	150E 4300750266	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-8D-12-15	08	120S	150E 4300750267	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-8D-12-15	08	120S	150E 4300750268	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-8D-12-15	08	120S	150E 4300750269	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-8D-12-15	08	120S	150E 4300750270	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-8D-12-15	08	120S	150E 4300750271	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-8D-12-15	08	120S	150E 4300750272	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-8D-12-15	08	120S	150E 4300750273	Federal	GW	APD	PRICKLY PEAR

PRICKLY PEAR UF 5-9D-12-15	09	120S	150E 4300750274	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-9D-12-15	09	120S	150E 4300750275	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-9D-12-15	09	120S	150E 4300750276	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-9D-12-15	09	120S	150E 4300750277	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-9D-12-15	09	120S	150E 4300750278	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-9D-12-15	09	120S	150E 4300750279	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-9D-12-15	09	120S	150E 4300750280	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-9D-12-15	09	120S	150E 4300750281	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-9D-12-15	09	120S	150E 4300750282	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR US 1X-16D-12-15	10	120S	150E 4300750283	State	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-15D-12-15	10	120S	150E 4300750284	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-15D-12-15	10	120S	150E 4300750285	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-15D-13-15	10	120S	150E 4300750286	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-10D-12-15	15	120S	150E 4300750287	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-10D-12-15	10	120S	150E 4300750288	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15-10D-12-15	15	120S	150E 4300750289	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-10D-12-15	15	120S	150E 4300750290	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-10D-12-15	15	120S	150E 4300750291	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-10D-12-15	10	120S	150E 4300750292	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-10D-12-15	15	120S	150E 4300750293	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16-10D-12-15	15	120S	150E 4300750294	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13-11D-12-15	15	120S	150E 4300750295	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-11D-12-15	15	120S	150E 4300750296	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-11D-12-15	15	120S	150E 4300750297	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 13A-10D-12-15	10	120S	150E 4300750298	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-10D-12-15	10	120S	150E 4300750299	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11-10D-12-15	10	120S	150E 4300750300	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3A-15D-12-15	10	120S	150E 4300750301	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12-14D-12-15	14	120S	150E 4300750302	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-15D-12-15	10	120S	150E 4300750303	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4A-15D-12-15	10	120S	150E 4300750304	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14-10D-12-15	10	120S	150E 4300750305	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-17D-12-15	17	120S	150E 4300750306	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-17D-12-15	17	120S	150E 4300750307	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10A-17D-12-15	17	120S	150E 4300750308	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-7D-12-15	07	120S	150E 4300750309	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-17D-12-15	17	120S	150E 4300750310	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-7D-12-15	07	120S	150E 4300750311	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-17D-12-15	17	120S	150E 4300750312	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-7D-12-15	07	120S	150E 4300750313	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-7D-12-15	07	120S	150E 4300750314	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-7D-12-15	07	120S	150E 4300750315	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6X-17D-12-15	17	120S	150E 4300750316	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-17D-12-15	17	120S	150E 4300750317	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15B-17D-12-15	17	120S	150E 4300750318	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-20D-12-15	20	120S	150E 4300750319	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-7D-12-15	07	120S	150E 4300750320	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-20D-12-15	20	120S	150E 4300750321	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9A-20D-12-15	20	120S		Federal	GW	APD	PRICKLY PEAR
THE PERSON NAMED IN THE PERSON NAMED IN	_3						

PRICKLY PEAR UF 10A-20D-12-15	20	120S	150E 4300750323	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 10-20D-12-15	20	120S	150E 4300750324	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-7D-12-15	07	120S	150E 4300750325	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 14A-20D-12-15	20	120S	150E 4300750326	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 16A-20D-12-15	20	120S	150E 4300750327	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15A-20D-12-15	20	120S	150E 4300750328	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-7D-12-15	07	120S	150E 4300750329	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 15-20D-12-15	20	120S	150E 4300750330	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-7D-12-15	07	120S	150E 4300750331	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6-10D-12-15	09	120S	150E 4300750332	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5A-10D-12-15	09	120S	150E 4300750333	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 11A-10D-12-15	09	120S	150E 4300750334	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 6A-10D-12-15	09	120S	150E 4300750335	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 5-10D-12-15	09	120S	150E 4300750336	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 12A-10D-12-15	09	120S	150E 4300750338	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 3-10D-12-15	09	120S	150E 4300750339	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 4-10D-12-15	09	120S	150E 4300750340	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8-9D-12-15	09	120S	150E 4300750341	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 8A-9D-12-15	09	120S	150E 4300750342	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7A-9D-12-15	09	120S	150E 4300750343	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 7-9D-12-15	09	120S	150E 4300750344	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-9D-12-15	09	120S	150E 4300750345	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 2-9D-12-15	09	120S	150E 4300750346	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 1-24D-12-1	24	120S	150E 4300750348	Federal	GW	APD	PRICKLY PEAR
PRICKLY PEAR UF 9-13D-12-15	13	120S	150E 4300750349	Federal	GW	APD	PRICKLY PEAR
HORSE BENCH FED 4-20D-12-17	19	120S	170E 4300750350	Federal	GW	APD	
Horse Bench Federal 16-18D-12-17	19	120S	170E 4300750351	Federal	GW	APD	
PPU FED 9-34D-12-16	34	120S	160E 4300731430	17225 Federal	GW	OPS	PETERS POINT
PPU FED 15-35D-12-16	35	120S	160E 4300731475	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 12A-6D-13-17	31	120S	170E 4300750034	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 11A-31D-12-17	31	120S	170E 4300750036	2470 Federal	GW	OPS	PETERS POINT
PRICKLY PEAR U FED 7-21D-12-15	21	120S	150E 4300750055	14794 Federal	GW	OPS	PRICKLY PEAR
PETERS POINT U FED 9-6D-13-17	06	130S	170E 4300750120	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 14-6D-13-17	06	130S	170E 4300750121	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT U FED 15-6D-13-17	06	130S	170E 4300750121	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT UF 2-7D-13-17	06	130S	170E 4300750149	2470 Federal	GW	OPS	PETERS POINT
PETERS POINT UF 1-7D-13-17	06	130S	170E 4300750150	2470 Federal	GW	OPS	PETERS POINT
PRICKLY PEAR US 1A-16D-12-15	09	120S	150E 4300750192	14794 State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR US 2A-16D-12-15	09	120S	150E 4300750192	14794 State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR US 2-16D-12-15	09	120S	150E 4300750194	14794 State	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 9A-9D-12-15	09	120S	150E 4300750194	14794 Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 10-9D-12-15	09	120S	150E 4300750190	14794 Federal	GW	OPS	PRICKLY PEAR
	09	120S	150E 4300750197	14794 Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 10A-9D-12-15					GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 14-9D-12-15	09	120S	150E 4300750199	14794 Federal	GW	OPS	PRICKLY PEAR PRICKLY PEAR
PRICKLY PEAR UF 14A-9D-12-15	09	120S	150E 4300750200	14794 Federal		OPS	PRICKLY PEAR PRICKLY PEAR
PRICKLY PEAR UF 15-9D-12-15	09	120S	150E 4300750201	14794 Federal	GW		
PRICKLY PEAR UF 15A-9D-12-15	09	120S	150E 4300750203	14794 Federal	GW	OPS	PRICKLY PEAR
PRICKLY PEAR UF 16A-9D-12-15	09	120S	150E 4300750204	14794 Federal	GW	OPS	PRICKLY PEAR
SHARPLES 1 GOVT PICKRELL	11	120S	150E 4300716045	7030 Federal	GW	. P	

STONE CABIN UNIT 1	13	120S	140E 4300716542	12052 Federal	GW	P	
STONE CABIN FED 1-11	11	120S	140E 4300730014	6046 Federal	GW	P	
STONE CABIN FED 2-B-27	27	120S	150E 4300730018	14794 Federal	GW	P	PRICKLY PEAR
JACK CANYON 101-A	33	120S	160E 4300730049	2455 Federal	GW	P	
PETERS POINT ST 2-2-13-16	02	130S	160E 4300730521	14387 State	GW	P	
PRICKLY PEAR ST 16-15	16	120S	150E 4300730522	14794 State	GW	P	PRICKLY PEAR
PETERS POINT U FED 36-2	36	120S	160E 4300730761	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 36-3	36	120S	160E 4300730762	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 36-4	36	120S	160E 4300730763	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 14-25D-12-16	36	120S	160E 4300730764	2470 Federal	GW	P	PETERS POINT
HUNT RANCH 3-4	03	120S	150E 4300730775	13158 State	GW	$\mathbf{P}_{\perp}$	
PETERS POINT U FED 4-31D-12-17	36	120S	160E 4300730810	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-26D-12-16	36	120S	160E 4300730812	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR UNIT 13-4	13	120S	140E 4300730825	14353 Federal	GW	P	
PRICKLY PEAR UNIT 21-2	21	120S	150E 4300730828	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 6-7D-13-17	06	130S	170E 4300730859	14692 Federal	GW	P	PETERS POINT
PETERS POINT ST 4-2-13-16	02	130S	160E 4300730866	14386 State	GW	P	
PRICKLY PEAR U ST 13-16	16	120S	150E 4300730933	14794 State	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 11-16	16	120S	150E 4300730944	14794 State	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 7-16	16	120S	150E 4300730945	14794 State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-25	25	120S	150E 4300730954	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 16-35	35	120S	160E 4300730965	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-6-13-17	06	130S	170E 4300730982	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-6D-13-17	06	130S	170E 4300731004	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 16-31D-12-17	06	130S	170E 4300731005	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 5-13-12-14	13	120S	140E 4300731008	14897 Federal	GW	P	•
PETERS POINT U FED 12-31D-12-17	36	120S	160E 4300731009	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 2-36D-12-16	36	120S	160E 4300731010	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 9-36-12-16	36	120S	160E 4300731011	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR U ST 36-06	36	120S	150E 4300731018	14794 State	GW	P	PRICKLY PEAR
PETERS POINT U FED 8-35D-12-16	36	120S	160E 4300731024	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 4-12D-13-16	02	130S	160E 4300731049	14692 Federal	GW	P	PETERS POINT
PETERS POINT ST 5-2D-13-16 DEEP	02	130S	160E 4300731056	15909 State	GW	P	
PRICKLY PEAR U FED 13-23-12-15	23	120S	150E 4300731073	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-27D-12-15	23	120S	150E 4300731074	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-26D-12-15	23	120S	150E 4300731075	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-22D-12-15	23	120S	150E 4300731076	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-28D-12-15	21	120S	150E 4300731121	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 2-12D-13-16	06	130S	170E 4300731158	14692 Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 15-21-12-15	21	120S	150E 4300731164	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-28D-12-15	21	120S	150E 4300731165	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 13-21D-12-15	21	120S	150E 4300731166	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 10-36D-12-16	36	120S	160E 4300731174	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-36D-12-16	36	120S	160E 4300731175	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 15-17-12-15	17	120S	150E 4300731183	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11-17D-12-15	17	120S	150E 4300731184	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-22D-12-15	22	120S	150E 4300731186	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-22-12-15	22	120S	150E 4300731187	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-22D-12-15	22	120S	150E 4300731188	14794 Federal	GW	P	PRICKLY PEAR

PRICKLY PEAR 11-15D-12-15	22	120S	150E 4300731189	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-18D-12-15	18	120S	150E 4300731192	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-18-12-15	18	120S	150E 4300731193	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-27D-12-15	27	120S	150E 4300731194	15569 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 12-27D-12-15	27	120S	150E 4300731195	15568 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-27-12-15	27	120S	150E 4300731196	15570 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-20D-12-15	20	120S	150E 4300731197	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7-20-12-15	20	120S	150E 4300731198	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-20-12-15	20	120S	150E 4300731206	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 2-36-12-15	36	120S	150E 4300731226	15719 State	GW	P	
PRICKLY PEAR U ST 4-36-12-15	36	120S	150E 4300731227	14794 State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-27D-12-15	22	120S	150E 4300731237	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 13-22-12-15	22	120S	150E 4300731238	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3-27D-12-15	22	120S	150E 4300731239	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 9-16-12-15	16	120S	150E 4300731240	14794 State	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-28D-12-15	28	120S	150E 4300731241	16028 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-27D-12-15	28	120S	150E 4300731242	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-28-12-15	28	120S	150E 4300731243	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-28D-12-15	28	120S	150E 4300731244	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U ST 1-16-12-15	16	120S	150E 4300731245	14794 State	GW	P	PRICKLY PEAR
PPU FED 11-18D-12-15	18	120S	150E 4300731257	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 11-20D-12-15	20	120S	150E 4300731258	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-25D-12-15	25	120S	150E 4300731259	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 12-25D-12-15	25	120S	150E 4300731260	16068 Federal	GW	P	PRICKLY PEAR
PPU FED 15-6D-13-17	06	130S	170E 4300731261	16103 Federal	GW	P	PETERS POINT
PP UF 3-36-12-16	36	120S	160E 4300731271	2470 Federal	GW	P	PETERS POINT
PP UF 6-36-12-16	36	120S	160E 4300731272	2470 Federal	GW	P	PETERS POINT
PPU FED 6-35D-12-16	35	120S	160E 4300731275	2470 Federal	GW	P	PETERS POINT
PPU FED 14-26D-12-16	26	120S	160E 4300731277	2470 Federal	GW	P	PETERS POINT
PPU FED 8-34-12-16	34	120S	160E 4300731279	2470 Federal	GW	P	PETERS POINT
PP ST 8-2D-13-16 (DEEP)	02	130S	160E 4300731280	16069 State	GW	P	
PPU FED 6-34D-12-16	34	120S	160E 4300731281	2470 Federal	GW	P	PETERS POINT
PPU FED 14-26D-12-15	35	120S	150E 4300731282	16224 Federal	GW	P	PRICKLY PEAR
PPU FED 2-35-12-15	35	120S	150E 4300731283	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 10-26D-12-15	35	120S	150E 4300731284	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 9-17-12-15	17	120S	150E 4300731287	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 1-17D-12-15	17	120S	150E 4300731288	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 7-17D-12-15	17	120S	150E 4300731289	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 7-1D-13-16 ULTRA DEEP	06	130S	170E 4300731293	14692 Federal	GW	P	PETERS POINT
PPU FED 1-18D-12-15	18	120S	150E 4300731294	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 7-18D-12-15	18	120S	150E 4300731295	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 5-17D-12-15	18	120S	150E 4300731296	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 10-17D-12-15	17	120S	150E 4300731307	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 8-17D-12-15	17	120S	150E 4300731308	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 12-17D-12-15	17	120S	150E 4300731309	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 13-17D-12-15	17	120S	150E 4300731310	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14-17D-12-15	17	120S	150E 4300731311	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16-18D-12-15	17	120S	150E 4300731312	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 8-18D-12-15	18	120S	150E 4300731313	14794 Federal	GW	P	PRICKLY PEAR

PPU FED 3-18D-12-15	18	120S	150E 4300731314	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-18-12-15	18	120S	150E 4300731315	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 5-18D-12-15	18	120S	150E 4300731316	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 6-18D-12-15	18	120S	150E 4300731317	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16-27-12-16	27	120S	160E 4300731318	2470 Federal	GW	P	PETERS POINT
PPU FED 10-27D-12-16	27	120S	160E 4300731319	2470 Federal	GW	P	PETERS POINT
PPU FED 2-34D-12-16	34	120S	160E 4300731320	2470 Federal	GW	P	PETERS POINT
PPU FED 16-17D-12-15	17	120S	150E 4300731321	14794 Federal	GW	P	PRICKLY PEAR
PPU ST 15-16D-12-15	16	120S	150E 4300731322	14794 State	GW	P	PRICKLY PEAR
PPU ST 16-16D-12-15	16	120S	150E 4300731323	14794 State	GW	P	PRICKLY PEAR
PPU ST 14-16D-12-15	16	120S	150E 4300731324	14794 State	GW	P	PRICKLY PEAR
PPU FED 2-7D-13-17 DEEP	06	130S	170E 4300731326	14692 Federal	GW	P	PETERS POINT
PPU FED 3-21D-12-15	21	120S	150E 4300731328	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-21D-12-15	21	120S	150E 4300731329	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 2-35D-12-16	35	120S	160E 4300731345	2470 Federal	GW	P	PETERS POINT
PPU FED 7-35D-12-16	35	120S	160E 4300731346	2470 Federal	GW	P	PETERS POINT
PPU FED 4-35D-12-16	35	120S	160E 4300731347	2470 Federal	GW	P	PETERS POINT
PPU FED 7-36D-12-16	36	120S	160E 4300731348	2470 Federal	GW	P	PETERS POINT
PPU FED 11-36D-12-16	36	120S	160E 4300731349	2470 Federal	GW	P	PETERS POINT
PPU FED 15-25D-12-16	36	120S	160E 4300731351	2470 Federal	GW	P	PETERS POINT
PPU FED 13-25D-12-16	36	120S	160E 4300731352	2470 Federal	GW	P	PETERS POINT
PPU FED 4-36D-12-16	36	120S	160E 4300731353	2470 Federal	GW	P	PETERS POINT
PPU FED 13-15D-12-15	22	120S	150E 4300731358	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14-15D-12-15	22	120S	150E 4300731359	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4-22D-12-15	22	120S	150E 4300731360	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 6-22D-12-15	22	120S	150E 4300731361	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 2-28D-12-15	28	120S	150E 4300731362	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16X-21D-12-15	28	120S	150E 4300731363	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 5A-27D-12-15	28	120S	150E 4300731364	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 1-35D-12-16	35	120S	160E 4300731365	2470 Federal	GW	P	PETERS POINT
PPU FED 1A-28D-12-15	28	120S	150E 4300731368	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14A-18D-12-15	18	120S	150E 4300731393	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 10-18D-12-15	18	120S	150E 4300731394	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 15A-18D-12-15	18	120S	150E 4300731395	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16A-18D-12-15	18	120S	150E 4300731396	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 12-22D-12-15	22	120S	150E 4300731398	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 11-22D-12-15	22	120S	150E 4300731399	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 14-22D-12-15	22	120S	150E 4300731400	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 4A-27D-12-15	22	120S	150E 4300731401	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 13-26D-12-16	26	120S	160E 4300731403	2470 Federal	GW	P	PETERS POINT
PPU FED 15-26D-12-16	26	120S	160E 4300731404	2470 Federal	GW	P	PETERS POINT
PPU FED 3-35D-12-16	26	120S	160E 4300731405	2470 Federal	GW	P	PETERS POINT
PPU FED 10-26D-12-16	26	120S	160E 4300731406	2470 Federal	GW	P	PETERS POINT
PPU FED 11-26D-12-16	26	120S	160E 4300731407	2470 Federal	GW	P	PETERS POINT
PPU FED 12-26D-12-16	26	120S	160E 4300731408	2470 Federal	GW	P	PETERS POINT
PPU FED 11-27D-12-16	27	120S	160E 4300731409	2470 Federal	GW	P	PETERS POINT
PPU FED 15-27D-12-16	27	120S	160E 4300731410	2470 Federal	GW	P	PETERS POINT
PPU FED 9-27D-12-16	27	120S	160E 4300731411	2470 Federal	GW	P	PETERS POINT
PPU FED 11-21D-12-15	21	120S	150E 4300731412	14794 Federal	GW	P	PRICKLY PEAR

PPU FED 6-21D-12-15	21	120S	150E 4300731413	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 12-21D-12-15	21	120S	150E 4300731414	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 8-20D-12-15	20	120S	150E 4300731419	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 1A-20D-12-15	20	120S	150E 4300731420	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 2-20D-12-15	20	120S	150E 4300731421	14794 Federal	GW	P	PRICKLY PEAR
PPU ST 7A-16D-12-15	16	120S	150E 4300731422	14794 State	GW	P	PRICKLY PEAR
PPU ST 6-16D-12-15	16	120S	150E 4300731423	14794 State	GW	P	PRICKLY PEAR
PPU ST 10A-16D-12-15	16	120S	150E 4300731424	14794 State	GW	P	PRICKLY PEAR
PPU ST 3-16D-12-15	16	120S	150E 4300731425	14794 State	GW	P	PRICKLY PEAR
PPU FED 1-34D-12-16	34	120S	160E 4300731427	2470 Federal	GW	P	PETERS POINT
PPU FED 7-34D-12-16	34	120S	160E 4300731428	2470 Federal	GW	P	PETERS POINT
PPU FED 5-35D-12-16	34	120S	160E 4300731429	2470 Federal	GW	P	PETERS POINT
PPU FED 5-21D-12-15	21	120S	150E 4300731451	14794 Federal	GW	P	PRICKLY PEAR
PPU ST 8-16D-12-15	16	120S	150E 4300731455	14794 State	GW	P	PRICKLY PEAR
PPU ST 12-16D-12-15	16	120S	150E 4300731456	14794 State	GW	P	PRICKLY PEAR
PPU ST 12A-16D-12-15	16	120S	150E 4300731457	14794 State	GW	P	PRICKLY PEAR
PPU ST 15A-16D-12-15	16	120S	150E 4300731458	14794 State	GW	P	PRICKLY PEAR
PPU ST 10-16D-12-15	16	120S	150E 4300731459	14794 State	GW	P	PRICKLY PEAR
PPU ST 11A-16D-12-15	16	120S	150E 4300731460	14794 State	GW	P	PRICKLY PEAR
PPU ST 13A-16D-12-15	16	120S	150E 4300731461	14794 State	GW	P	PRICKLY PEAR
PPU FED 3-34D-12-16	34	120S	160E 4300731466	2470 Federal	GW	P	PETERS POINT
PPU FED 5-34D-12-16	34	120S	160E 4300731467	2470 Federal	GW	P	PETERS POINT
PPU FED 4-34D-12-16	34	120S	160E 4300731468	2470 Federal	GW	P	PETERS POINT
PPU FED 10-7D-12-15	07	120S	150E 4300731470	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 15-7D-12-15	07	120S	150E 4300731471	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 9-7D-12-15	07	120S	150E 4300731472	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 16-7D-12-15	07	120S	150E 4300731473	14794 Federal	GW	P	PRICKLY PEAR
PPU FED 10-35D-12-16	35	120S	160E 4300731474	2470 Federal	GW	P	PETERS POINT
PPU FED 9-35D-12-16	35	120S	160E 4300731476	2470 Federal	GW	P	PETERS POINT
PPU ST 6A-16D-12-15	16	120S	150E 4300731477	14794 State	GW	P	PRICKLY PEAR
PPU ST 4-16D-12-15	16	120S	150E 4300731478	14794 State	GW	P	PRICKLY PEAR
PPU ST 4A-16D-12-15	16	120S	150E 4300731479	14794 State	GW	P	PRICKLY PEAR
PPU ST 5A-16D-12-15	16	120S	150E 4300731480	14794 State	GW	P	PRICKLY PEAR
PPU ST 3A-16D-12-15	16	120S	150E 4300731481	14794 State	GW	P	PRICKLY PEAR
PPU ST 16A-16D-12-15	16	120S		14794 State	GW	P	PRICKLY PEAR
PPU ST 9A-16D-12-15	16	120S	150E 4300731485	14794 State	GW	P	PRICKLY PEAR
PPU ST 16B-16D-12-15	16	120S	150E 4300731514	14794 State	GW	P	PRICKLY PEAR
PPU ST 14B-16D-12-15	16	120S	150E 4300731515	14794 State	GW	P	PRICKLY PEAR
PPU ST 13B-16D-12-15	16	120S	150E 4300731516	14794 State	GW	P	PRICKLY PEAR
PETERS POINT U FED 9-26D-12-16	25	120S	160E 4300750021	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-25D-12-16	25	120S	160E 4300750022	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 10-31D-12-17	31	120S	170E 4300750023	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-31D-12-17	31	120S	170E 4300750024	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 13A-31D-12-17	31	120S	170E 4300750025	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-31D-12-17	31	120S	170E 4300750026	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 14-31D-12-17	31	120S		2470 Federal	`GW	P	PETERS POINT
PETERS POINT U FED 14A-31D-12-17	31	120S	170E 4300750028	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-25D-12-16	25	120S	160E 4300750029	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-6D-13-17	31	120S	170E 4300750033	2470 Federal	GW	P	PETERS POINT

PETERS POINT U FED 10-25D-12-16	25	120S	160E 4300750035	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-36D-12-16	36	120S	160E 4300750037	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 15-36D-12-16	36	120S	160E 4300750038	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 11-1D-13-16	36	120S	160E 4300750039	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-1D-13-16	36	120S	160E 4300750040	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR U FED 9-22D-12-15	22	120S	150E 4300750041	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-22D-12-15	22	120S	150E 4300750042	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-22D-12-15	22	120S	150E 4300750043	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-27D-12-15	22	120S	150E 4300750044	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-15D-12-15	15	120S	150E 4300750045	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-15D-12-15	15	120S	150E 4300750046	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-15D-12-15	15	120S	150E 4300750047	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-15D-12-15	15	120S	150E 4300750048	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11A-15D-12-15	15	120S	150E 4300750049	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-21D-12-15	21	120S	150E 4300750050	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-21D-12-15	21	120S	150E 4300750051	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2A-21D-12-15	21	120S	150E 4300750052	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-22D-12-15	21	120S	150E 4300750053	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5A-22D-12-15	21	120S	150E 4300750054	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7A-21D-12-15	21	120S	150E 4300750056	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-21D-12-15	21	120S	150E 4300750057	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8A-21D-12-15	21	120S	150E 4300750057	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-8D-12-15	08	120S	150E 4300750059	14794 Federal	GW	P	PRICKLY PEAR
	08	120S	150E 4300750060	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-8D-12-15	08	120S	150E 4300750061	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-17D-12-15	08	120S	150E 4300750061	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1A-17D-12-15		120S	160E 4300750062	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 3A-34D-12-16	27	120S	160E 4300750064	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 4A-34D-12-16	27	120S	160E 4300750064	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 12-27D-12-16	27			2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 13-27D-12-16	27	120S	160E 4300750066 160E 4300750067	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 13A-27D-12-16	27	120S		18204 Federal	GW	P	I LILKS I OHVI
PETERS POINT U FED 14-27D-12-16	27	120S	160E 4300750068				PETERS POINT
PETERS POINT U FED 14A-27D-12-16	27	120S	160E 4300750069	2470 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 1-22D-12-15	22	120S	150E 4300750076	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 2-22D-12-15	22	120S	150E 4300750077	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 8-22D-12-15	22	120S	150E 4300750078	14794 Federal	GW	P	
PRICKLY PEAR U FED 3-17D-12-15	17	120S	150E 4300750079	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3A-17D-12-15	17	120S	150E 4300750080	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-17D-12-15	17	120S	150E 4300750081	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-17D-12-15	17	120S	150E 4300750082	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5A-17D-12-15	17	120S	150E 4300750083	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR Ú FED 6-17D-12-15	17	120S	150E 4300750084	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6A-17D-12-15	17	120S	150E 4300750085	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 7A-17D-12-15	17	120S	150E 4300750086	14794 Federal	GW	Р	PRICKLY PEAR
PRICKLY PEAR U FED 12A-17D-12-15	17	120S	150E 4300750087	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 9-12D-12-14	12	120S	140E 4300750088	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 10-12D-12-14	12	120S	140E 4300750089	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 15-12D-12-14	12	120S	140E 4300750090	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 16-12D-12-14	12	120S	140E 4300750091	14794 Federal	GW	P	PRICKLY PEAR

PRICKLY PEAR U FED 3-20D-12-15	20	120S	150E 4300750098	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 3A-20D-12-15	20	120S	150E 4300750099	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4-20D-12-15	20	120S	150E 4300750100	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 4A-20D-12-15	20	120S	150E 4300750101	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 5-20D-12-15	20	120S	150E 4300750102	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6-20D-12-15	20	120S	150E 4300750104	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 6A-20D-12-15	20	120S	150E 4300750105	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 11A-20D-12-15	20	120S	150E 4300750106	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR U FED 12A-20D-12-15	20	120S	150E 4300750107	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT U FED 5-31D-12-17	36	120S	160E 4300750109	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 6-31D-12-17	36	120S	160E 4300750116	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 9X-36D-12-16	36	120S	160E 4300750117	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 1-36D-12-16	36	120S	160E 4300750118	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 10-6D-13-17	06	130S	170E 4300750119	2470 Federal	GW	P	PETERS POINT
PETERS POINT U FED 15-31D-12-17	06	130S	170E 4300750123	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR UF 7A-18D-12-15	17	120S	150E 4300750136	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8A-18D-12-15	17	120S	150E 4300750137	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9A-18D-12-15	17	120S	150E 4300750138	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 12-20D-12-15	20	120S	150E 4300750139	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 16A-8D-12-15	08	120S	150E 4300750140	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 15A-8D-12-15	08	120S	150E 4300750141	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 13A-9D-12-15	08	120S	150E 4300750142	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 13-9D-12-15	08	120S	150E 4300750143	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 12-9D-12-15	08	120S	150E 4300750144	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 10-8D-12-15	08	120S	150E 4300750145	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9-8D-12-15	08	120S	150E 4300750146	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 2A-17D-12-15	08	120S	150E 4300750147	14794 Federal	GW	P	PRICKLY PEAR
PETERS POINT UF 12-5D-13-17	06	130S	170E 4300750151	2470 Federal	GW	P	PETERS POINT
PETERS POINT UF 13-5D-13-17	06	130S	170E 4300750152	2470 Federal	GW	P	PETERS POINT
PETERS POINT UF 13-30D-12-17	30	120S	170E 4300750153	18347 Federal	GW	P	PETERS POINT
PETERS POINT UF 14-30D-12-17	30	120S	170E 4300750154	18350 Federal	GW	P	PETERS POINT
PETERS POINT UF 12-30D-12-17	30	120S	170E 4300750155	18346 Federal	GW	P	PETERS POINT
PETERS POINT UF 11-30D-12-17	30	120S	170E 4300750156	18348 Federal	GW	P	PETERS POINT
PETERS POINT UF 3-31D-12-17	30	120S	170E 4300750157	2470 Federal	GW	P	PETERS POINT
PETERS POINT UF 2-31D-12-17	30	120S	170E 4300750158	18349 Federal	GW	P	PETERS POINT
PETERS POINT UF 16-25D-12-16	30	120S	170E 4300750159	2470 Federal	GW	P	PETERS POINT
PETERS POINT UF 9-25D-12-16	30	120S	170E 4300750160	2470 Federal	GW	P	PETERS POINT
PRICKLY PEAR UF 1A-22D-12-15	22	120S	150E 4300750171	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 6A-22D-12-15	22	120S	150E 4300750173	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 7A-22D-12-15	22	120S	150E 4300750174	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8A-22D-12-15	22	120S	150E 4300750175	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 14B-15D-12-15	22	120S	150E 4300750176	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 9-9D-12-15	09	120S	150E 4300750195	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 16-9D-12-15	09	120S	150E 4300750202	14794 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 8-14D-12-15	14	120S	150E 4300750216	18289 Federal	GW	P	PRICKLY PEAR
PRICKLY PEAR UF 15-14D-12-15	14	120S	150E 4300750221	18290 Federal	GW	P	PRICKLY PEAR
PETERS POINT UF 7X-36D-12-16	36	120S	160E 4300750231	2470 Federal	GW	P	PETERS POINT
PETERS POINT UF 8-36D-12-16	36	120S	160E 4300750232	2470 Federal	GW	P	PETERS POINT
PETERS POINT ST 6-2D-13-16	02	130S	160E 4300731017	14472 State	D	PA	
1 E (E)(O) (O)(1) O) (O)(E) (O) (O) (O) (O) (O) (O) (O) (O) (O) (O	52	1505	2302 .200.2101	—	-		

PTS 33-36 STATE	36	110S	140E 4301330486	6190 State	GW	PA	ARGYLE
PRICKLY PEAR U FED 10-4	10	120S	140E 4300730823	14462 Federal	GW	S	
PRICKLY PEAR U FASSELIN 5-19-12-15	19	120S	150E 4300730860	14853 Fee	GW	S	
PRICKLY PEAR U ST 5-16	16	120S	150E 4300730943	14794 State	GW	S	PRICKLY PEAR
PRICKLY PEAR U FED 7-33D-12-15	33	120S	150E 4300730985	14771 Federal	GW	S	
PETERS POINT ST 8-2D-13-16	02	130S	160E 4300731016	14471 State	GW	S	
PPU FED 4-35D-12-15	35	120S	150E 4300731285	16223 Federal	GW	S	PRICKLY PEAR
PPU FED 5-36D-12-16	36	120S	160E 4300731350	2470 Federal	GW	S	PETERS POINT
PRICKLY PEAR U FED 5A-20D-12-15	20	120S	150E 4300750103	14794 Federal	GW	S	PRICKLY PEAR
PRICKLY PEAR U FED 13A-17D-12-15	20.	120S	150E 4300750108	14794 Federal	GW	S	PRICKLY PEAR
PRICKLY PEAR UF 2A-22D-12-15	22	120S	150E 4300750172	14794 Federal	GW	S	PRICKLY PEAR